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INCREASING KNOWLEDGE AND DETECTION OF RACIAL AND ETHNIC  
MICROAGGRESSIONS IN WHITE COLLEGE STUDENTS

by

Christina A. Patterson

A dissertation submitted in partial fulfillment  
of the requirements for the degree

of

DOCTOR OF PHILOSOPHY

in

Psychology

Approved:

---

Melanie M. Domenech Rodríguez, Ph.D.  
Major Professor

---

Scott C. Bates, Ph.D.  
Committee Member

---

Renee V. Galliher, Ph.D.  
Committee Member

---

Donna Gilbertson, Ph.D.  
Committee Member

---

Eduardo Ortiz, Ph.D.  
Committee Member

---

Mark R. McLellan, Ph.D.  
Vice President for Research and  
Dean of the School of Graduate Studies

UTAH STATE UNIVERSITY  
Logan, Utah

2017

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## ABSTRACT

Increasing Knowledge and Detection of Racial and Ethnic Microaggressions  
in White College Students

by

Christina A. Patterson, Doctor of Philosophy

Utah State University, 2017

Major Professor: Melanie M. Domenech Rodríguez, Ph.D.  
Department: Psychology

To combat microaggressions and their impact on persons of color, there needs to be an increased awareness and ability to detect microaggressions when they occur. This study examined the efficacy of a multimedia intervention aimed at increasing White individuals' ability to accurately detect microaggressions.

Undergraduate university students (61 women, 40 men, 2 other) were recruited from two predominantly White universities (PWU). All participants completed pre- and post-intervention materials, and 54 participants completed the 1-week follow-up materials. At pre-intervention, participants watched a set of video clips (e.g., television, movies), some of which contained racial and ethnic microaggressions, answered a series of questions regarding the content of the videos, and completed the Colorblind Racial Attitudes Scale (CoBRAS). Participants in the high-exposure intervention condition watched a 1-hour video lecture on racial and ethnic microaggressions. Participants in the

low-exposure and control conditions read an article (e.g., racial and ethnic microaggressions or positive psychology) and answered a series of questions regarding the content of the articles. At post-intervention, completed immediately following the intervention, and 1-week follow-up, participants watched another set of video clips and some of which included racial and ethnic microaggressions. Participants then answered a series of questions regarding the content of the video, and completed a CoBRAS.

The high-exposure intervention condition did not demonstrate any significant change from pre- to post- intervention detection rates. There was no significant change from pre- to post-intervention to 1-week follow-up detection rates between conditions. Post-hoc analyses regarding colorblindness indicated a significant decrease in CoBRAS total score from pre-intervention ( $M = 62.23$ ,  $SD = 15.39$ ) to post-intervention across participants ( $M = 61.67$ ,  $SD = 15.66$ ),  $t(102) = 3.26$ ,  $p = .002$ ,  $d = .32$ , indicating a decrease in overall colorblindness. There was a significant decrease in Unawareness of Racial Privilege scores from pre-intervention ( $M = 26.67$ ,  $SD = 7.51$ ) to post-intervention across participants ( $M = 25.51$ ,  $SD = 7.87$ ),  $t(102) = 3.28$ ,  $p = .001$ ,  $d = .32$ , indicating an increased awareness of racial privilege. Awareness of institutional discrimination and blatant racial discrimination did not shift significantly. Interpretations and implications of the findings, are discussed.

## PUBLIC ABSTRACT

### Increasing Knowledge and Detection of Racial and Ethnic Microaggressions in White College Students

Christina A. Patterson

Scholars have strongly suggested that to combat microaggressions and their impact on persons of color, there needs to be an increased awareness and ability to detect microaggressions when they occur. There is limited research on how to practically address these concerns. This study examined the efficacy of a multimedia intervention aimed at increasing White individuals' ability to accurately detect microaggressions. The high-exposure intervention was compared against two other conditions, low-exposure and control, at pre-, post-, and 1-week follow-up from intervention.

Undergraduate university students were recruited from two predominantly white universities (PWU). Participants watched a series of videos to determine if racial and ethnic microaggressions were present in the videos and completed self-report questionnaires assessing colorblindness.

The high-exposure intervention condition did not demonstrate any significant change from pre- to post- intervention detection rates. There was no significant change from pre- to post-intervention to 1-week follow-up detection rates between conditions. Post-hoc analyses regarding colorblindness indicated a significant decrease in Colorblind Racial Attitudes Scale CoBRAS total score from pre-intervention to post-intervention across all participants indicating a decrease in overall colorblindness. There was a

significant decrease in Unawareness of Racial Privilege scores from pre-intervention to post-intervention across participants indicating an increased awareness of racial privilege. Awareness of institutional discrimination and blatant racial discrimination did not shift significantly pre- to post- intervention. Interpretations and implications of the findings, strengths and limitations of the study, and future directions are discussed.

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Christina A. Patterson



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## **CHAPTER I**

### **INTRODUCTION**

The Civil Rights movements of the 1960s were widely hailed as landmark moments towards eradicating racism. Over the past five decades, many have argued whether or not racism is still a problem in the U.S. As recently as June 2013, the U.S. Supreme Court made a decision on the constitutionality of the Voting Rights Act of 1965 which was put in place to protect ethnic and racial minorities from being deterred and excluded from the voting process. Since 1965, the Voting Rights Act has repeatedly been renewed without much opposition until the Act was challenged by the state of Alabama. In *Shelby County v. Holder* (2013), the Supreme Court declared Section 4, which mandated a formula for increasing ethnic minorities' access to the voting process, as unconstitutional. Justice Thomas, who concurred with the popular vote stated that "our nation has changed" (p. 29) referring to a decrease in overt discrimination based on race that persons of color have experienced at the polls. Yet scholars have consistently challenged the notion by asking, is racism truly a thing of the past?

Social scientists have argued that racism has not disappeared but rather has evolved from overt expressions of prejudices into subtler messages that are harder to detect (Gaertner & Dovidio, 2005; McConahay & Hough, 1976); however, recent political events, namely the election of Donald Trump as President, indicate that overt racism may become a thing of the present (Rosa & Bonilla, 2017). Modern racism (Gaertner & Dovidio, 2005; Kinder & Sears, 1981; McConahay & Hough, 1976) has been described as subtle, covert instances of racism that reveal prejudices and biases

against persons of color. Racial microaggressions have been posited as an expression of modern racism (D. W. Sue et al., 2007) and are defined as “brief and commonplace daily verbal, behavioral, and environmental indignities, whether intentional or unintentional, that communicate hostile, derogatory, or negative racial slights and insults” (p. 273).

The existence and detection of racial microaggressions has been hotly contested in the field of psychology and even outside by the larger communities. Both Whites and persons of color have been shown to display difficulties in readily attributing a possible interaction as a microaggression (L. Bell, 2003; D. W. Sue, 2010). It has been reported that when people of color receive a microaggression, they spend a significant amount of time trying to determine if the interaction was in fact a microaggression (D.W. Sue, 2010). Whereas, for Whites, the combination of the subtlety of racial microaggressions (D. W. Sue et al., 2007), the privileged place Whites hold in society, termed *white privilege* (Delgado & Stefancic, 2001), and the desire of Whites to see themselves as being true to egalitarian views (Gaertner & Dovidio, 2005) may decrease the likeliness that Whites will be able to detect racial microaggressions. Scholars have strongly suggested that to combat microaggressions and their impact on persons of color, there needs to be an increased awareness and ability to detect microaggressions when they occur (Minikel-Lacocque, 2013; Pierce, Carew, Pierce-Gonzalez, & Wills, 1977; D. W. Sue et al., 2007).

There is limited research on how to practically address these concerns (Paluck & Green, 2009). A review of the literature indicates that brief (Paluck & Green, 2009; Soble, Spanierman, Hsin-Ya, 2011), integrated (Bezrukova, Spell, Perry, & Jehn, 2016;

Garriott, Reiter, & Brownfield, 2016), and experimental (Paluck & Green, 2009) interventions that utilize media (Estrada, Durlak, & Juarez, 2002; Garriott et al., 2016; Soble et al., 2011) are most likely to be effective in reducing prejudice.

The purpose of this study was to examine the efficacy of a brief, online intervention aimed at increasing White college students' ability to identify racial and ethnic microaggressions. The intervention was designed to incorporate the strongest facets of the existing findings. A multimedia, online, brief intervention aimed at increasing knowledge and detection of racial and ethnic microaggressions in media clips was developed and compared to two other conditions, control and low-exposure to the information through self-guided reading of an article about racial and ethnic microaggressions.

The research questions addressed in this study were as follows.

1. Will an intervention designed to increase knowledge about racial microaggressions result in a higher accuracy of detection for racial microaggressions in White college students? I expected participants in the high exposure condition to have higher detection and accuracy post-intervention as compared to pre-intervention.
2. Will there be a difference in detection and accuracy between high-exposure, low-exposure, and control conditions in White college students? I expected detection and accuracy changes to be most notable in high exposure as compared to low-exposure and control conditions. I also expected detection and accuracy changes to be higher for low-exposure as compared to the control group.
3. Does colorblindness moderate the ability of an individual to detect microaggressions? I expected colorblindness to moderate the ability of individuals to detect microaggressions.



## **CHAPTER II**

### **LITERATURE REVIEW**

This study was envisioned within a Critical Race Theory (CRT) framework (Delgado & Stefancic, 2001). The literature review provides an overview of CRT, the history of racism, how microaggressions are a form of modern racism, the role and impact of microaggressions on persons of color, and the need and struggle to educate those within dominant groups on multiculturalism and cultural competence. For the purpose of this study, I will outline definitions of terms that are consistent with the theoretical framework and within psychology.

Race is defined as “the category to which others assign individuals on the basis of physical characteristics, such as skin color or hair type, and the generalizations and stereotypes made as a result,” and ethnicity is defined as “the acceptance of the group mores and practices of one’s culture of origin and the concomitant sense of belonging (American Psychological Association [APA], 2003, p. 380). I use the term minority to describe individuals in marginalized positions, those without power. For further understanding of my conceptualization of power, see the section on CRT. Persons of color will refer to any person identifying with African American/Black/African ancestry, Asian American/Asian/Asian ancestry, American Indian/Native American/Alaskan Native/Indigenous, Latinx/Hispanic, or as part of any marginalized ethnic/racial ancestry.

It is important to realize that there are significant political and societal differences in the description of persons of color, the power associated with identities, and identity changes across time (Eisenhower, Suyemoto, Lucchese, & Canenguez, 2014; Hitlin,

Brown, & Elder, 2007; Liebler et al., 2017). For the purposes of this study, I will use terms used in the original citations to remain consistent with the original authors' conceptualizations and understandings thus ethnic and racial labels will vary throughout the document. As varying authors' may have conceptualized race and ethnicity differently from one another, I will not attempt to group each identity under one umbrella.

### **Critical Race Theory**

CRT is an interdisciplinary theoretical approach to examining race, racism, and power within the U.S. and serves as the overarching theory of this study. The theory is derived from critical legal studies that originally emphasized the overarching sociocultural context of race and how race and law interacted within that context (Delgado & Stefancic, 2001). The tenets of CRT are: racism is normal, the group in power wants to stay in power, identities are complex, the power of narrative processes, and a critique of liberalism.

CRT asserts that people tend to view racism as abnormal, but in reality, it is a common experience that permeates every aspect of life (Delgado & Stefancic, 2001). CRT argues that racism is formed from social constructions and no biological or genetic reasoning for racism exists (Chang, 2002; Delgado & Stefancic, 2001), which is consistent with social psychological theories of racism (Gaertner & Dovidio, 2005). Because racism is a social construct, the power associated with race and meaning of a person's race has differed depending on time and need known as racialization. In the

U.S., critical race theorists argue that those classified as White individuals have historically held power and privilege over racial and ethnic minority groups and continue to hold power and privilege over racial and ethnic minority groups. Perceptions of intelligence of individuals in different racial and ethnic groups, perceived desire of minorities to work for White individuals, and perceived deviancy of a racial or ethnic group might shift depending on the needs and desire of the group in power. Such perceptions are reflected in legal proceedings, labor needs, and media depictions (Delgado & Stefancic, 2001).

Another tenet of CRT is that the group in power, Whites, benefit from being in power. To hold on to power, the dominant group utilizes tools such as colorblindness. Colorblindness is a liberal assertion that a person, particularly a White person, does not use the color of a person's skin, or a person's perceived race, as a criterion for judgement of that individual (Delgado & Stefancic, 2001; D. W. Sue et al., 2007). Critical race theorists argue that those who support colorblindness believe that colorblindness is a tool that will produce equality and reduce racism (Delgado & Stefancic, 2001). CRT challenges the assertion that colorblindness will eradicate racism (Valdes, Culp, & Harris, 2002), and instead posits that colorblindness allows racism to go unacknowledged because it ignores the reality that racial and ethnic minorities faces and makes it difficult to address and create meaningful social change (Delgado & Stefancic, 2001). It should be noted that other critical scholars have argued against using the term colorblindness as the term utilizes ableist language indicating that blindness is a weakness or somehow problematic and instead offer the term color-evasiveness (Annamma, Jackson, &

Morrison, 2017). Additionally, because Whites have material gains (i.e., wealth, jobs) as the dominant group, Whites are less likely to want to eradicate racism so as not to lose the benefits of associated with holding the power (D. Bell, 1995; Delgado & Stefancic, 2001).

If the group in power does not want to relinquish power, then it becomes difficult, if not impossible, to make changes to increase the power of minority groups (Delgado & Stefancic, 2001). D. Bell (1995) argued that persons of color (particularly Blacks) only achieve power and equality when it benefits Whites; this is known as *interest convergence*. For example, Blacks only benefit when Whites also somehow benefit from giving Blacks power (D. Bell, 1995) which can also be viewed as the changing racialization of a group to benefit the dominant group, Whites. D. Bell specifically argued that the Brown vs Board of Education of Topeka (1954) verdict declared segregation unconstitutional because the group in power, Whites, needed to be viewed in a positive light and thus used desegregation of Blacks as a means to an end.

A key tenet of CRT is the recognition of the complexity of identities. The theory of intersectionality posits that a person does not ascribe to just one identity (e.g., a woman, a lesbian, a mother) but rather a combination of all of those identities that are at constant interplay for how that person fits into society (Cho, Crenshaw, & McCall, 2013; Valdes et al., 2005). Critical race theorists argue that race is one aspect of that identity, and all aspects of identity are important to a person's experiences (Valdes et al., 2005). In conjunction with intersectionality is the theory of anti-essentialism. Essentialism seeks to find the common underlying component of a matter such as all persons of color coming

together to fight racism; whereas, anti-essentialism seeks to acknowledge the differences each person may experience despite a shared commonality (Delgado & Stefancic, 2001) due to the intersectionality of their own identities coming into play and creating a unique experience for each person. Intersectionality and anti-essentialism aim to increase an understanding of the individual experience in relation to the context.

CRT emphasizes the recognition of the importance of narration, or the voices of people of color. It is a fundamental component of CRT that incorporates the power of storytelling in varying discourses (e.g., academia, popular culture) to better understand how race is seen in the U.S. (Delgado & Stefancic, 2001) and allows for those that have been subjugated to have their stories heard while challenging and dismantling the dominant realities (MacKinnon, 2002; Montoya, 2002). Personal narratives provide an alternate reality to the dominant story often told and provides insight into what it is like to be a person of color, which can be difficult for a White person to understand (Delgado & Stefancic, 2001). The use of personal narratives is considered an important aspect of identity formation of the person telling their story and through others that receive the story (Montoya, 2002). Another perceived benefit of storytelling is providing a voice to people who have been silenced or often suffer in silence and provide bridges for shared experiences. Giving a voice to the experiences of discrimination and naming the discrimination is the first step in changing the system (Delgado & Stefancic, 2001).

CRT is a social justice movement, and scholars of CRT criticize other movements, primarily liberalism. Liberalism has been defined as “political philosophy that holds that the purpose of the government is to maximize liberty; in civil rights, the

view that law should enforce formal equality in treatment” (Delgado & Stefancic, 2001, p. 190). Critical race theorists argue that liberalism as a philosophy enforces colorblind racial ideology, promotes rights that are almost always procedural (e.g., right to a fair trial) instead of substantive (e.g., housing) where there is never a guarantee that the rights are actually fair and equal, and argues for a universalist approach (Delgado & Stefancic, 2001).

### **History of Racism**

Racism is often viewed through two lenses, the individual and the system. On the individual level, racism is expressed via negative attitudes, beliefs, and behaviors towards a racial or ethnic minority person or group (Okazaki, 2009). Negative attitudes and beliefs fall under the umbrella term prejudice; negative behaviors are forms of discrimination (Gaertner & Dovidio, 2005). On the systemic level, racism is viewed as cultural and institutional negative attitudes, beliefs, and behaviors that involve social power and result in disadvantaged outcomes for ethnic/racial minorities (Okazaki, 2009). In order for racism to be impactful, there are three important considerations: (a) one group believes itself to be superior, (b) the group that believes itself superior has the power to carry out the racist behavior, and (c) racism affects multiple racial and ethnic groups (Solorzano, Ceja, & Yosso, 2000, p. 61).

Racism creates the foundations of inequities in which ethnic/racial minorities are disadvantaged. If groups of people are being disadvantaged, then the inverse of that disadvantage must be that people belonging to another group are in the advantageous

position. In the U.S., persons of color are disadvantaged indicating that Whites must be in the advantageous position. This advantageous position is known as White privilege (McIntosh, 2011).

Prior to the civil rights era, old-fashioned racism was an acceptable and dominant form of racism. *Old-fashioned racism* has been described as overt prejudiced beliefs and discriminatory practices against persons of color, such as laws that deprived persons of color of rights given to Whites (e.g., voting rights). The term old-fashioned describes racism that was no longer considered “fashionable” or acceptable (Dovidio, Gaertner, Ufkes, Saguy, & Pearson, 2016; McConahay & Hough, 1976).

After the civil rights movement, theorists argue that old-fashioned racism started to decrease since it was no longer considered acceptable, and *modern racism* became more prevalent. Modern racism theory posits that individuals develop racial beliefs early in life through two primary mechanisms, cognitive and conative aspects (McConahay & Hough, 1976). Conative aspects, those relative to public policy and law, can change quickly such as the implementation or abolishment of a discriminatory law; however, cognitive and affective components of racism, such as negative beliefs about a particular minority group, are much slower to adapt to the outward expression of equality and racism (e.g., changing of laws). Because of the slower adaptation of cognition and affect to the changing sociocultural landscape, negative affect and beliefs can linger and be transmitted to future generations (McConahay & Hough, 1976). It is worth noting that due to recent political and social movements, particularly the election of Donald Trump as President of the U.S., scholars have argued that there is a reversion to overt racism and

a reinforcement of the power relations described in CRT (Rosa & Bonilla, 2017).

Although different in specifics, modern racism has been interchangeably referred to as *symbolic racism* (Kinder & Sears, 1981) and *aversive racism* (Gaertner & Dovidio, 2005). All three theories of this more contemporary type of racism share the common assumption that the individuals in power, Whites, believe in equality and for the most part adamantly condemn racism but that Whites still have lingering, unconscious negative beliefs and attitudes about persons of color. The prejudice of Whites against minorities is not considered as a collection of conscious beliefs but rather unconscious beliefs that are instilled in a person early in life via social conditioning. In symbolic racism, theorists argue that Whites believe that prejudice and discrimination do not exist and that persons of color, particularly Blacks, are demanding too much, failing to work hard for progress, and have gotten what they deserve (Sears & Henry, 2003). Aversive racism (Gaertner & Dovidio, 2005) mirrors McConahay and Hough's (1976) modern racism theory positing that individuals form racist beliefs due to a complex working of social and cultural contexts that is instilled in a person early on in life. Aversive racism also posits that Whites acknowledge holding egalitarian views and value themselves as being non-prejudiced but due to the socialization process of race, hold derogatory beliefs and attitudes about persons of color that develop on an unconscious level (Gaertner & Dovidio, 2005). Furthermore, due to Whites' personal beliefs about equality, Whites fail to notice or acknowledge their own biases. The failure to acknowledge prejudice results in expressions of racism via subtle discriminatory acts (Dovidio et al., 2016). The subtlety of the bias acts as a buffer so that the perpetrator of the bias does not recognize



the unfair treatment being perpetrated against minorities (Dovidio & Gaertner, 2004).

Modern racism expressions can take many forms and are often difficult to identify if the expressed belief or behavior is in fact racist. Some expressions are subtle (Dovidio et al., 2016; Solorzano et al., 2000; D. W. Sue et al., 2007) making them difficult to identify, and others are disguised as expressions of equality (e.g., colorblindness) that are vehicles of modern racism (Delgado & Stefancic, 2001; D. W. Sue et al., 2007).

Expressions of modern racism have been evaluated in hiring decisions (McConahay, 1983), media and television (Entman, 1990; Pierce et al., 1977), legal proceedings (J. D. Johnson, Whitestone, & Jackson, 1995; Pfeifer & Ogloff, 2003; Sommers & Ellsworth, 2000), attributions of guilt (Pfeifer & Bernstein, 2003), and via microaggressions (Pettigrew 1989; Pierce et al., 1977 Solorzano et al., 2000; D. W. Sue et al., 2007). This study closely examined the expression of modern racism via microaggressions in media.

### **Racial and Ethnic Microaggressions**

#### **Defining Racial and Ethnic Microaggressions**

Racial microaggressions were first identified and labeled by Pierce et al. (1977 as “subtle, stunning, often automatic and non-verbal exchanges which are ‘put-downs’ of blacks by offenders” (p. 66). Since then, the definition of racial microaggressions has expanded to include “subtle insults (verbal, non-verbal, and/or visual) directed toward people of color often automatically or unconsciously” (Solorzano et al., 2000, p. 60) and more recently “brief and commonplace daily verbal, behavioral, and environmental indignities, whether intentional or unintentional, that communicate hostile, derogatory, or

negative racial slights and insults” (D. W. Sue et al., 2007, p. 273).

Sue et al. (2007) developed a taxonomy to further identify and understand types of microaggressions. The taxonomy developed by Sue et al. (2007) posits that racial microaggressions are classified into three overarching forms: *microassaults*, *microinsults*, and *microinvalidations*. See Figure 1 for a depiction of the relationships between the overarching forms of racial microaggressions and the themes displayed under each (D. W. Sue et al., 2007).

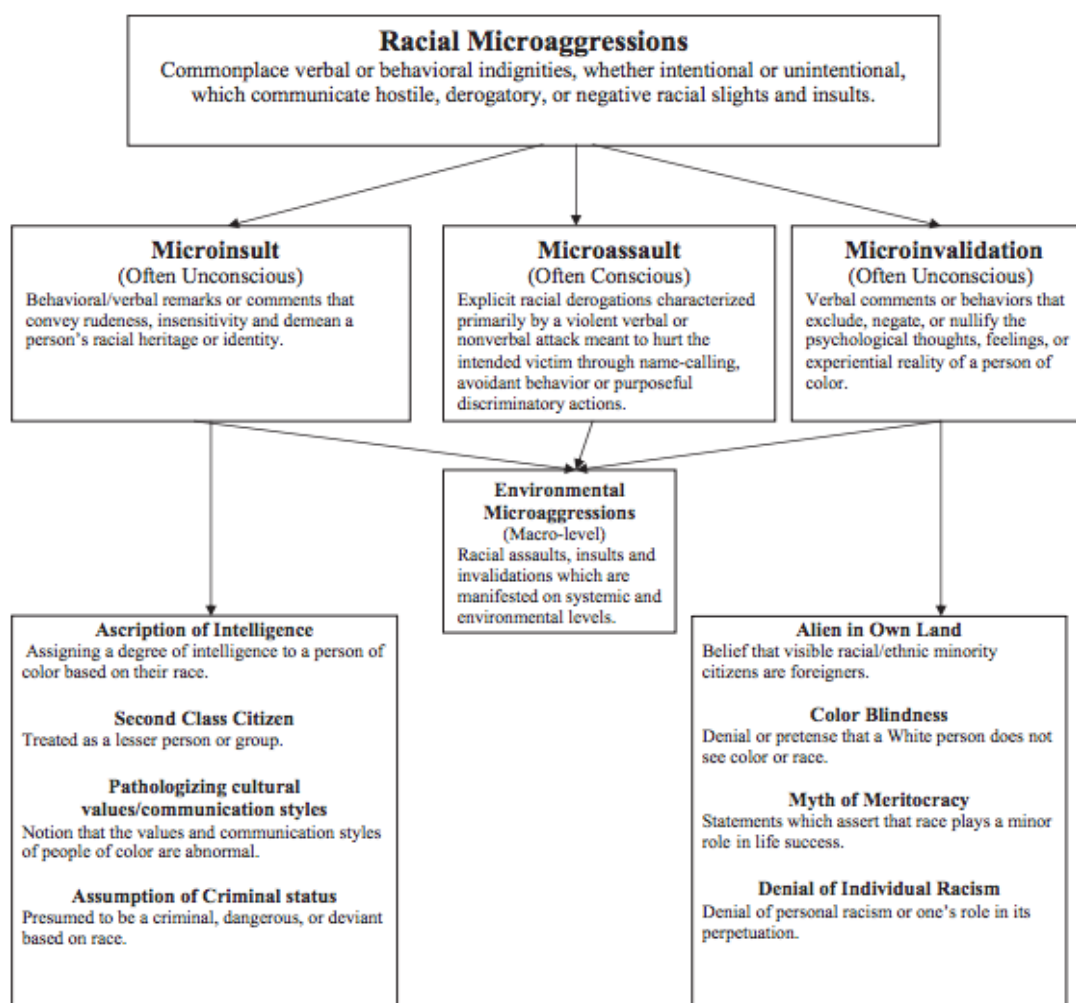


Figure 1. Categories of and relationships among racial microaggressions (D. W. Sue et al., 2007, p. 278).

Microassaults are characterized by an “explicit racial derogation” with the intention to hurt a person or persons (D. W. Sue et al., 2007, p. 274). Microassaults are most similar to old-fashioned racism and may appear as racial slurs or exclusion of a person based on race. Microassaults can also be displayed environmentally or through explicit intentional use of microinsults or microinvalidations (D. W. Sue et al., 2007). Microassaults are most likely to occur when the perpetrator believes in some degree of anonymity when committing a microaggression, when he or she feels safe in a group of perceived like-minded individuals, or when experiencing a loss of self-control (D.W. Sue, 2010). It has been argued that microassaults are not “micro” and should not be included as a category of microaggressions (Minikel-Lacocque, 2013). At this time, there is no consensus about how to understand and conceptualize the “micro” of microaggressions; however, the “micro” of microaggressions have been discussed as in relation to the person and that the ‘micro’ only matters because of the “macro” systems at play (King, 2016).

Microinsults are communications that are demeaning or derogatory about a person’s racial identity or heritage (D. W. Sue et al., 2007). Microinsults have thematically been experienced and recognized as ascriptions of intelligence (i.e., having a high or low intelligence ascribed to one based on race or ethnicity), being a second-class citizen, having one’s cultural values or communication styles pathologized, and assumption of criminality (D. W. Sue et al., 2007). Black and Native youth reported experiencing pathologization of cultural values (e.g., being questioned about hair) and assumption of criminality (Henfield, 2011; Jones & Galliher, 2015; D. W. Sue,

Capodilupo, & Holder, 2008). African Americans reported high rates of experiences as second-class citizens and assumption of criminality, and African American and Latinx/Hispanic individuals have reported experiencing high levels of assumption of inferiority microinsults (Forrest-Bank & Jenson, 2015). Asian Americans reported often being placed in the role of higher intelligence or above average knowledge of mathematics (ascription of intelligence), being classified as disengaged or uninterested due to silence on the classroom (pathologizing of cultural values), among others (D. W. Sue, Bucceri, Lin, Nadal, & Torino, 2009).

Microinvalidations are communications that negate a person of color's experience or feelings (D. W. Sue et al., 2007). Microinvalidations have been identified via common themes experienced by persons of color including being treated as an alien in one's own land, being told that a person experiences the world via colorblindness, denial of an individual's own racism or role in the perpetuation of racism, and the myth of meritocracy (D. W. Sue et al., 2007). Asian Americans reported consistently being asked "Where are you from?" (alien in own land; D. W. Sue et al., 2009) and have cited this microinvalidation as the most commonly experienced form of racial microaggressions (Ong, Burrow, Ja, Fuller-Rowell, & Sue, 2013). Blacks reported working in environments in which persons of color never ascend the company ladder (myth of meritocracy; D. W. Sue et al., 2008).

Since the creation of the first taxonomy of racial microaggressions, other themes of racial microaggressions have been identified and examined. Nadal, Escobar, Prado, David, and Haynes (2012) examined racial microaggressions experienced by Filipino-

Americans and found that participants not only experienced many of the racial microaggressions described by D. W. Sue et al. (2007), such as second class citizen, ascription of intelligence, and pathologization of cultural values but also experienced lesser examined microaggressions including invalidation of interethnic differences, sexualization of women, demasculinization of men, exclusion from the Asian American community, and mistaken identity, among others. Further, the education level of an Asian American may influence the type of microaggression experienced (e.g., Asian Americans without college degrees may be more likely to experience alien in own land; Nadal, Wong, Sriken, Griffin, & Fujii-Doe 2015). Johnston and Nadal (2010) further expanded on D. W. Sue et al.'s taxonomy by examining microaggressions experienced by multiracial individuals including isolation, exoticization or objectification, assumption of monoracial or mistaken identity, denial of multiracial reality, and pathologizing of identity or experiences. The taxonomy of multiracial microaggressions closely resembled some of the themes posited by D. W. Sue et al., but emphasized an important distinction in which multiracial persons experience these microaggressions most commonly. This study used D. W. Sue et al.'s taxonomy for the purpose of describing and informing participants about racial microaggressions.

It is also necessary to note that there has been an increased demand and use of an expanded concept of microaggressions to explore outside of race and ethnicity exclusively by examining the experiences of subtle discrimination against other marginalized groups such as the lesbian, gay, bisexual, transgender community (Sarno & Wright, 2013; Shelton & Delgado-Romero, 2013; Woodford, Howell, Kulick, &

Silverschanz, 2013), gender (Ross-Sheriff, 2012), the intersectionality of race and gender (Lewis, Mendenhall, Harwood, & Browne Hunt, 2013) and race and sexual orientation (Bowleg, 2013), within mental illness (Gonzales, Davidoff, Nadal, & Yanos, 2015), within hierarchical higher education positions (Young, Anderson, & Stewart, 2015), and body type (Owen, 2012). While equally important, relevant and consistent with CRT framework, the experience of microaggressions expanding outside of race was not further explored as this study focused explicitly on racial microaggressions.

### **Impact of Racial and Ethnic Microaggressions**

Racial and ethnic microaggressions have been linked with academic and mental health outcomes. In the academic domain, racial and ethnic microaggressions have been linked with perception of a negative school climate by students, which can act as a hindrance to educational achievement (Carter Andrews, 2012). Ethnic minority graduate students reported experiencing higher rates of microaggressions on campus, a decreased sense of belongingness, and higher rates of emotional distress. Furthermore, in the same study, belongingness was inversely related to self-reported academic engagement (Clark, Mercer, Zeigler-Hill, & Dufrene, 2012). Students living on campus at predominantly White universities reported perceiving campus climate more negatively than White peers because they experienced a myriad of microaggressions in the residential dormitories (Harwood, Browne Hunt, Mendenhall, & Lewis, 2012). Latino/a students that dropped out of high school identified discrimination and microaggressions and negative school climate as the most salient reasons for leaving school early (Luna & Revilla, 2013).

Similarly, within the workplace, Black women reported experiencing microaggressions including stereotypes, the universality of the Black experience, invisibility, and exclusion (Holder, Jackson, & Ponterotto, 2015) and decreased job satisfaction (DeCuir-Gunby & Gunby, 2016).

Racial microaggressions can negatively impact the mental health of people of color. College students of color reportedly experience significantly higher rates of racial microaggressions, which positively correlated with increased risks for anxiety, and underage binge drinking of alcohol (Blume, Thyken, Lovato, & Denny, 2012). Experiences of microaggressions correlated positively with report of somatic symptoms and negative affect as reported by Asian Americans (Ong et al., 2013). Experiencing microinvalidations was the most significant predictor of negative mental health for Asian Americans compared to other types of microaggressions (Nadal et al., 2015). African Americans reported that experiencing a microaggression increased their anxiety (Liao, Weng, & West, 2016). Despite the increased risk of mental health concerns, persons of color such as Blacks are less likely to seek mental health treatment, also potentially related to the history of experiencing discrimination in the counseling session and fear of experiencing further discrimination during counseling (Buser, 2009).

### **Microaggressions and CRT**

The examination of microaggressions within a CRT context demonstrates a natural fit between the two. Microaggression research has been predominantly qualitative allowing for the voices of persons of color to be heard and their experiences shared (Henfield, 2011; Minikel-Lacocque, 2013; Ong et al., 2013; Solorzano et al., 2000; D. W.

Sue, 2010; D. W. Sue et al., 2007, 2008, 2009) which is in line with CRT's position on the importance of the narrative process.

One of D. W. Sue et al.'s (2007) microaggression invalidation types is the concept of colorblindness. D. W. Sue (2010) asserted that colorblindness is a means to deny differences allowing for denial of power and privilege, and challenging colorblindness is a core belief of CRT. The racialization of persons of color is understood in the different themes and types of microaggressions presented by D. W. Sue et al. (2007) and others. Beliefs about criminality, intelligence, treating others as second-class citizens, and pathologization of cultural values are examples of how persons of color have been racialized and what it means to be a person of color based on the dominant group's views about racial/ethnic minorities. Furthermore, many researchers are beginning to examine the intersectionality of different identities (Bowleg, 2013; Lewis et al., 2013), but as previously noted, this study focused solely on racial and ethnic microaggressions.

### **Addressing Racial and Ethnic Microaggressions**

D. W. Sue et al. (2007) stated that the first step in increasing clinician multicultural education and training is to (a) "increase their ability to identify racial microaggressions in general and in themselves in particular; (b) understand how racial microaggressions, including their own, detrimentally impact clients of color; and (c) accept responsibility for taking corrective actions to overcome racial biases" (p. 283). While D. W. Sue et al. recommended a need for personal responsibility to overcome racial biases, the scope of this study is limited to exploring the first two points. This study



focused on developing and examining the efficacy of a brief, online intervention aimed at increasing White college students' ability to identify racial microaggressions and understand their impact of persons of color. The remaining portion of the literature review will focus on examining the current literature on cultural competency and efficaciously teaching cultural competence.

### **Cultural Competence**

The tripartite model of cultural competence outlines three dimensions of cultural competency: awareness, knowledge, and skills (D. W. Sue, 2001; S. Sue, 1998). These three competency domains are widely considered essential multicultural facets of cultural competence as outlined in the APA Multicultural Guideline Recommendations (APA, 2003). *Awareness* is understanding one's own values and biases and how they influence the perception of self, others, and the world (S. Sue, 2006), including negative beliefs and stereotypes of others (D. W. Sue, Arredondo, & McDavis, 1992). Awareness increases a person's comfort with differences between the self and those that are racially, ethnically, and broadly, culturally different from oneself and moves towards respect for the differences (D. W. Sue et al., 1992). *Knowledge* refers to having specific knowledge of one's own culture and worldview, an understanding of others' cultures and worldviews, and the sociocultural influences (D. W. Sue et al., 1992; S. Sue, 2006). Knowledge provides the basis for individuals to understand how the influences of oppression, racism, and discrimination affect themselves and their interactions with others (D. W. Sue et al., 1992). Finally, *skills* are specific interactions and techniques in working with diverse

clientele (D. W. Sue et al., 1992). Such techniques include seeking consultation as needed, continuing education in cultural matters, familiarizing oneself with current research, seeking out cultural diversity in their own community, and consistent engagement with their own awareness process (D. W. Sue et al., 1992). Although much of the cultural competency research in psychology has examined counseling and clinical implications, the same tenets of cultural competency can be applied to a variety of situations with individuals across training levels and needs.

### **Cultural Competence and Racial and Ethnic Microaggressions**

Specifically pertaining to development of cultural competence related to racial and ethnic microaggressions, racism scholars have expressed a need for increased detection of microaggressions (Pierce et al., 1977; D. W. Sue et al., 2007) and a call for programs to increase awareness of racism in the dominant group and provide a common language to discuss these occurrences (Minikel-Lacocque, 2013).

Microaggressions pose a challenge in that the common underlying component of racial microaggressions is the *subtlety* of the insults directed at people of color. Because of the swiftness and seemingly innocuousness of microaggressions, microaggressions are often dismissed or expressed below the threshold of consciousness of the person committing the microaggression (D. W. Sue et al., 2007). Due to their privileged place in society, it is possible that Whites have been taught not to recognize their privilege (McIntosh, 2011) or that the subtlety of the microaggression insulates the perpetrators from understanding their bias (Dovidio & Gaertner, 2004) making it less likely for

Whites to grasp when a microaggression has occurred. CRT posits that Whites do not want to acknowledge racial discrimination existing in the world because of the belief that colorblindness is a means to be equal and fair (Delgado & Stefancic, 2001), and because most Whites truly believe in equality for all, they have a hard time being aware of their own racism and biases (Gaertner & Dovidio, 2005). Whites may be less likely to openly discuss their role in the perpetuation of racism for fear of appearing racist, fear of realizing their own racism, fear of confronting White privilege which would force them to acknowledge their own benefits from being in a privileged position, and a fear of taking responsibility to end racism (D. W. Sue, 2011). Because of the aversive internal and possible external consequences that accompany the awareness of racism, the likeliness that Whites are aware of microaggressions, either ones they commit or ones they witness, is decreased often resulting in increased defensiveness when confronted with dialogues on racism (D. W. Sue, 2010). In an analysis of transcripts of educated adults about race/racism, results indicated that the majority of Whites interviewed promoted colorblind ideology and failed to recognize experiences of racism of persons of color (L. Bell, 2003). As discussed, microaggressions have been shown to relate to detrimental effects on a person who experiences microaggressions creating a need for increased awareness and education about microaggressions (Sue et al., 2007) which can assist an individual, of any race, to think and behave differently towards people of color (Pierce et al., 1977).

### **Cultural Competence Education and Interventions**

Despite the call for cultural competence education and interventions, information regarding the practical aspect of teaching cultural competence is scarce (Paluck & Green, 2009). Colvin-Burque, Davis-Maye, and Zugazaga (2007) evaluated the efficacy of a model designed to increase cultural competence in undergraduate social work students by examining change in colorblind racial ideology via the Colorblind Racial Attitudes Scale (CoBRAS; Neville, Lilly, Duran, Lee, & Browne, 2000) with results showing a significant decrease in colorblind racial ideology from the beginning of the course to the end. However, this study only examined the impact of the course on the awareness facet of cultural competence. Chiodo, Sonn, and Morda (2014) examined the experiences of students in a 6-week unit of cultural diversity. The study focused on qualitative feedback provided by students. These courses were designed for broad undergraduate populations and did not exclusively focus on White students' experiences.

Interventions designed for White people were evaluated for efficacy by evaluating changes in White experience, specifically White guilt (Garriott et al., 2016; Soble, Spanierman, & Liao, 2010) and awareness of White privilege (Garriott et al., 2016). Conversations with White students about race and racism can yield fruitful responses furthering the introspection needed to continue the conversation; however, poorly led conversations can push White students further away from engaging with the dialogue (deKoven, 2011).

Further, there is little information on how to develop an efficacious intervention. In a review of the literature examining prejudice reduction interventions, the majority of

prejudice reduction interventions were nonexperimental (77%; 367/474), and of the studies that had experimental designs, about one tenth specifically addressed cultural competence needs (Paluck & Green, 2009). Interventions aimed at cognitive learning were shown to be more effective than those that targeted attitudinal or affective facets (Bezrukova et al., 2016; Paluck & Green, 2009). Use of entertainment has been shown to be effective as a manipulation (Garriott et al., 2016) especially as technology continues to influence the design and delivery of training systems (Salas & Cannon-Bowers, 2001). Brief interventions have been shown to be more powerful (Paluck & Green, 2009). Integrated interventions targeting cognitive learning, attitudinal and affective facets, and behavioral learning are more effective than interventions targeting only one facet (Bezrukova et al., 2016).

### **Summary and Purpose of the Study**

This study examined the efficacy of an intervention aimed at increasing White individuals' ability to detect microaggressions. The intervention was compared against two other conditions to determine if significant differences existed between the conditions. The specific research questions addressed in this study were: (a) Will an intervention designed to increase knowledge about racial microaggressions result in a higher detection and accuracy for racial microaggressions in White college students? (b) Will there be a difference in detection and accuracy between high-exposure, low-exposure, and control conditions in White college students? And (c) Does colorblindness moderate the ability of an individual to detect microaggressions?

## **CHAPTER III**

### **METHOD**

#### **Design**

The design was a 3 x 3 mixed factorial design, consisting of one between-subjects factor (intervention condition: Control, Low Exposure, High Exposure) and one within-subject factor (time: pre-intervention test, immediate post-intervention test, 1-week post-intervention test). Participants were randomly assigned to an intervention exposure representing one of the three levels of the between-subjects factor. The within-subject factor was the ability to detect microaggressions at each of the three data collection times: pre-intervention, post-intervention, and 1-week follow-up. The dependent variables were the detection rate of microaggressions and accuracy of identifying microaggression type. All participation was completed online at the discretion of the participant.

#### **Sample Size, Power, and Precision**

No current literature provided information on possible effect size, thus this study was exploratory. A priori power analyses were conducted using G\*Power (Faul, Erdfelder, Buchner, & Lang, 2009). For a .10 alpha level seeking a moderate effect size of .25, a minimum of 81 participants were needed; whereas, for a .05 alpha level seeking a moderate effect size of .25, a minimum of 102 participants were needed. The study aimed to collect a minimum of 102 participants in line with a .05 standard alpha level. The study successfully recruited enough participants for confirmatory analysis (Jaeger &

Halliday, 1998).

### **Participant Characteristics**

Undergraduate university students (61 women; 40 men; 2 other;  $M_{age} = 23$ ,  $SD_{age} = 6.69$ , range 18 – 47 years) were recruited from two Predominantly White Universities (PWU; 96 Utah State University; 6 Weber State University). All participants self-identified as White, Caucasian, or European American. The vast majority of participants reported an absence of disabilities (93.20%), were members of The Church of Jesus Christ of Latter-day Saints (LDS; 75.73%), heterosexual sexual orientation (85.44%), and parents with at least some college education (parent/caregiver 1 87.40%; parent/caregiver 2 88.30%). For full demographic characteristics, see Table 1.

### **Materials**

#### **Contact Form**

The contact form (Appendix A) obtained information regarding participant name, email address, university ID for credit purposes, and a unique eight-digit pin. To create the pin, participants were directed to use cued letters and numbers to create a unique identifier. The pin included: third letter of first name, third letter of last name, last two digits of zip code, birth day (including 0), last letter of first name, and last letter of last name. For example, if a participant's name was Harry Potter, his birthdate 07/30/1980 and zip Code 12345, then his pin would be RT4530YR.

Table 1

*Participant Demographics*

Variable	Control (n = 34)	Low-exposure (n = 35)	High-exposure (n = 34)	Total (N = 103)
Gender				
Male	13	14	13	40
Female	20	21	20	61
Other	1	0	1	2
Disability status				
Yes	2	2	3	7
No	32	33	31	96
Religion				
Atheist	2	2	0	4
LDS	28	26	24	78
Christian–Not LDS	2	1	6	9
Agnostic	0	2	0	2
Other	0	0	1	1
None/not applicable	2	3	3	8
Sexual orientation				
Asexual	0	0	1	1
Gay/lesbian/homosexual	0	1	0	1
Bisexual	1	1	0	2
Demisexual	0	1	0	1
Straight/heterosexual	31	29	27	87
Year in college				
First Year	18	19	17	54
Sophomore	7	5	7	19
Junior	6	6	3	15
Senior	3	5	7	15
State resident				
Yes	24	31	29	84
No	10	4	5	19
Parent/caregiver 1 education level				
Less than high school	0	1	1	2
Some high school	0	0	1	1
High school diploma/GED	1	6	2	9
Some college	9	7	6	22
College degree	20	17	13	50
Graduate degree	4	4	10	18
Not applicable	0	0	1	1

*(table continues)*



Variable	Control ( <i>n</i> = 34)	Low-exposure ( <i>n</i> = 35)	High-exposure ( <i>n</i> = 34)	Total ( <i>N</i> = 103)
Parent/caregiver 2 education level				
Less than high school	0	1	0	1
Some high school	0	0	2	2
High school diploma/GED	2	4	1	7
Some college	8	6	8	22
College degree	9	14	14	37
Graduate degree	14	10	7	31
Not applicable	1	0	1	2

*Note.* Numbers may not add to 103 due to missing items or lack of response

## Demographics

The Demographics Questionnaire (Appendix B) obtained information regarding self-reported age, participant sex, race and ethnicity, sexual orientation, religion, program major, residency status, disability, and parent/guardian education levels. The Demographics Questionnaire was developed for the purpose of this study.

## Video Clips

A total of 21 video clips divided into three sets of seven clips were used in this study to measure participants' ability to detect racial/ethnic microaggressions. Video clips ranged in length from 6 s to 2 min and contained content from web series, Vines, television shows, movies, and stand-up comedy. The use of video clips was purposeful in that media depictions can create biased and inaccurate portrayals of others; similarly, media can be used to educate and reduce prejudices (Estrada et al, 2002). For more information regarding the order of the video clips, a brief description of the content, and length of each video, see Table 2. To determine the final video clips and the order of the clips viewed, a three-step process occurred.

**Step one.** A total of 43 video clips were viewed by six individuals (five graduate

Table 2

*Video Clip Characteristics*

Video clip	Description	Length (seconds)	Media Type
Set One			
Crank 2	White man falls on car being driven by two Asian men and says “Did I drop some change, or did I hear a chink?”	10	Movie
When Bass Drops	Two White teenage boys listen to a song, when the music changes to the Tequila song, their dress change to sombreros, ponchos, and maracas	6	Vine
I’m Not Racist	White man opens the door to an Asian delivery man. White man asks another man if he ordered Chinese food. The second man says he ordered subs. The White man apologizes and says “Obviously Chinese people don’t only deliver Chinese food. I’m not racist.” The Asian man responds, “I’m not Chinese.”	42	Web Clip
The Big Bang Theory	An Indian man tells his White friends that the next time he calls for tech support, he will use an American accent. He then proceeds to imitate an American accent and says, “Hello my snow White American friends. Let’s put some meat on the BBQ and become obese.”	31	TV Show
Proud to be White	A White man discusses how proud he is to be White. He states that it is similar for a Black or Mexican man to be proud.	73	Web Clip
2 Broke Girls	Asian man creates a nametag for employee. He spells the name wrong. Another employee, a White woman, tells her that she can’t tell an Asian man he made a mistake or he will “go throw himself on a sword.”	25	TV Show
Pitch Perfect	White woman meets Asian roommate. When the roommate does not say anything, the White woman says, “Do you speak English? Just tell me where you’re at with English.”	7	Movie
Set Two			
Dr. Phil 1	Dr. Phil states that people are too sensitive and that discussion around sensitive topics need to occur. He compares baldness to being Black or Muslim.	63	TV Show
Reverse Racism	A young Black male child listens to country music. When a person walks by and looks at him, he changes it to rap and turns his hat backwards	6	Vine

*(table continues)*

Video clip	Description	Length (seconds)	Media Type
Harold & Kumar	Two White men coerce an Asian man into doing their work over the weekend. When one of the White men says that he feels bad about it, the other White man tells him not to worry because “Asians love crunching numbers”	97	Movie
Transformers	Two transformers have stereotypical African American Vernacular English (e.g., “popping a cap in his ass”) and use of derogatory language towards a Latino man	30	Movie
South Park	Two White boys and one Black boy make a presentation to the mayor that all crimes are hate crimes and by singling out race-based crimes, he is reinforcing that Blacks are different than Whites	88	TV Show
Criminal Minds	A White man running for Mayor states that the “browning of America” is related to criminality	22	TV Show
Achmed	A Muslim puppet sings Jingle Bombs, a song about using bombs to kill others	23	Stand-Up Comedy
Set Three			
Dem White Boyz	Two young White men are in a car. When the song turns to a rap song, they become dressed in “gangster clothing” with fake guns	7	Vine
Asians in the Library	A White woman talks about how Asian people are disrespectful due to their cultural differences. At the end of the video, she mocks their language with derogatory mocking	113	Web Clip
Morgan Freeman	Morgan Freeman discusses how he thinks there should not be a Black History Month because Black history is American history and should be incorporated into the general curriculum	37	TV Show
Where are you from	A White man asks an Asian woman where she is from. When she responds with a location in the U.S., he keeps asking her repeatedly where she is from	49	Web Clip
Crash	A White couple is replacing their locks. The White woman states that she wants her locks changed again in the morning because she assumes that the Latino man changing the locks is a “gangbanger”	87	Movie
Jose the Jalapeno	A puppet named Peanut makes fun of the way a puppet named Jose, a jalapeno, talks and states that he should speak English	45	Stand-Up Comedy
School House Rock	A song about how the U.S. is a melting pot and that every person who comes here, despite race/religion/etc., has the same opportunities to succeed	71	TV Show

*Note.* The titles of the videos were either created to address the name of the television show, movie, etc. (e.g., 2 Broke Girls, Crash) or were taken from the title of the video named by the creators of the content (e.g., Dem White Boyz is a self-titled name of a group of young White men who created numerous Vines).

students, one faculty member) who then completed a brief questionnaire to determine if a racial or ethnic microaggression was present in the clip. If a clip reached a minimum of 60% agreement that a racial or ethnic microaggression did or did not occur, it moved to step two otherwise clips were discarded. Of these 43 clips, 33 were retained.

**Step two.** A total of 33 video clips were viewed by an expert panel. The expert panel consisted of three graduate students (one White woman, one woman of color, one man of color), one faculty member (woman of color), and a consultant who has peer-reviewed publications on racial and ethnic microaggressions (man of color). All members of the expert panel had extensive training prior to participation in the panel including participating in graduate level diversity courses, and conducting lectures, professional, and informal presentations on microaggressions. Each of the final video clips were reviewed as a group. Each member of the group independently rated each video on whether or not a racial or ethnic microaggression occurred (Yes/No), and if yes, the category (e.g., microinsult, microassault, microinvalidation) and theme (e.g., ascription of intelligence, environmental, colorblindness) of each microaggression based on D. W. Sue et al.'s (2007) taxonomy (see Figure 1). Clips that received 80% interrater agreement on the presence or absence of a microaggression as well as the categorization, and theme moved to the final discussion round. If interrater reliability was not reached, the panel discussed their findings. If consensus of 80% or higher could not be reached, the clip was discarded. A total of 28 clips reached the final discussion round. Of the 28 clips, seven were grouped as microinvalidations, five were grouped as microassaults, four were grouped as non-microaggression race-related content, and 12 were grouped as

microinsults. To reduce the 28 clips into 21 clips, clips the panel thought were difficult to understand or were vague in their depictions of microaggressions were removed. One clip was removed as it was from a talent show from a country other than U.S., and one clip was removed as it was a commercial from another country. For final video clip categorizations and types, see Table 3.

Table 3

*Video Clip Categorization and Types*

Video clip	Racial/ethnic microaggression (Y/N)	Category	Type/theme	Interrater agreement %
Set One				
Crank 2	Y	Microassault	Environ	100
When Bass Drops	Y	Microinsult	PCV	100
I'm Not Racist	Y	Microinvalidation	DIR	100
The Big Bang Theory	N	N/A	N/A	100
Proud to be White	Y	Microinvalidation	DIR	100
2 Broke Girls	Y	Microinsult	PCV	80
Pitch Perfect	Y	Microinvalidation	AOL	80
Set Two				
Dr. Phil 1	Y	Microinvalidation	Colorblindness	100
Reverse Racism	N	N/A	N/A	100
Harold & Kumar	Y	Microinsult	AOI	80
Transformers	Y	Microassault	Environ	100
South Park	Y	Microinvalidation	Colorblindness	100
Criminal Minds	Y	Microinsult	AOC/SCC	100
Achmed	Y	Microassault	Environ	100
Set Three				
Dem White Boyz	Y	Microinsult	AOC/PCV	100
Asians in the Library	Y	Microassault	Environ	100
Morgan Freeman	N	N/A	N/A	100
Where are you from	Y	Microinvalidation	AOL	100
Crash	Y	Microinsult	AOC	100
Jose the Jalapeno	Y	Microassault	Environ	100
School House Rock	Y	Microinvalidation	MOM/colorblindness	100

*Note.* AOI = Ascription of Intelligence, SCC = Second Class Citizen, PVC = Pathologizing Cultural Values and Communication Styles, AOC = Assumption of Criminality, Environ = Environmental, AOL = Alien in Own Land, MOM = Myth of Meritocracy, DIR = Denial of Individual Racism. For definitions of each, see Figure 1.

**Step three.** Video clips were organized by category (i.e., microinsult, microassault, microinvalidation). Each video clip was then numbered one, two, or three in order of how they appeared on the list. The video clips were then grouped by number assignment so that seven clips were in each set. Once in a set, each clip was then randomly assigned a number between one and seven. The video clips were then sequentially ordered. This became the final order of the clips for each set. The ordering of the clips within each set did not vary across the study; however, the ordering of the sets of videos were counter-balanced. For parity, each set of clips contained one non-microaggression race-related clip. One nonmicroaggression race-related clip was included to assess participants' ability to discern a non-microaggression experience present in the video clip.

### **Microaggressions**

The Microaggression Detection Questionnaire (MDQ; Appendix C) was developed for the purpose of this study. The MDQ is a 4-item measure assessing participants' detection of racial and ethnic microaggressions in a viewed video clip (see Video Clips). Each item began with a *yes* (1), *no* (0) question (i.e., Did you see a racial or ethnic microaggression?) and a request to describe "what happened" when answers were affirmative. After the yes/no item, respondents were asked to provide a category for the microaggression as *microinvalidation* (1), *microinsult* (2), or *microassault* (3), or *not sure* (4). Respondents were then asked to specify which theme as *ascription of intelligence* (1), *second-class citizen* (2), *assumption of criminality* (3), *pathologizing cultural values* (4), *environmental* (5), *alien in own land* (6), *colorblindness* (7), *myth of meritocracy* (8),

*denial of individual racism* (9), or *not sure* (10). Respondents were allowed multiple selection of responses. Final scores for each video were calculated. To answer the research questions, data were transformed into variables that could be used in statistical analyses. The research questions focused on microaggression detection and accuracy. There were three detection variables and two accuracy variables. This section explains the procedures for how each variable was created to answer the research questions.

**Microaggression detection.** There were three detection variables: general microaggression detection, category detection, and theme detection. General microaggression detection focused on participants' ability to accurately detect the presence or absence of a racial or ethnic microaggression in the video. Participants watched seven pre-intervention videos, seven post-intervention videos, and had the option of watching seven 1-week follow-up videos. After watching each video, participants were asked whether or not they saw a racial or ethnic microaggression in the video. Participants could choose only Yes or No. There were a total of seven correct answers based on the expert panel coding (see Video Clips, see Table 3). Participants' answers were marked as correct or incorrect and summed together to create a total score (0-7; 0 = *none correct*, 7 = *all correct*) for each video set. The summed scores at pre-intervention, post-intervention, and 1-week follow-up became the score used in analyses examining general microaggression detection rates.

Category detection focused on participants' ability to detect the category of microaggression (i.e., microinsult, microassault, microinvalidation) in the video, if one was present. Participants watched seven pre-intervention videos, seven post-intervention

videos, and had the option of watching seven 1-week follow-up videos. After watching each video, participants were asked to identify the category of the microaggression depicted in the video. Participants could select multiple answers. If they correctly selected the category, they were given a score of 1 for that video. If the video did not depict a microaggression, the correct answer would have been none, and if no category was selected, participants received a score of 1 for that video. Participants' answers were marked as correct or incorrect and summed together to create a total score (0-7, 0 = *none correct*, 7 = *all correct*) for each video set. If the participant selected the correct answer and an incorrect answer, the participant was given credit for the correct answer but was not penalized for the incorrect answer. The summed category detection scores at pre-intervention, post-intervention, and 1-week follow-up became the score used in analyses examining category detection rates.

Theme detection focused on participants' ability to detect the theme of the microaggression (e.g., ascription of intelligence, second-class citizen, denial of individual racism) in the video, if one was present. Participants watched seven pre-intervention videos, seven post-intervention videos, and had the option of watching seven 1-week follow-up videos. After watching each video, participants were asked to identify the theme of the microaggression depicted in the video. Participants could select multiple answers. If they correctly selected the right category, they were given a score of 1 for that video. If the video did not depict a microaggression, the correct answer would have been none, and if no theme was selected, participants received a score of 1 for that video. Participants' answers were marked as correct or incorrect and summed together to create



a total score (0-7, 0 = *none correct*, 7 = *all correct*) for each video set. If the participant selected the correct answer and an incorrect answer, the participant was given credit for the correct answer but was not penalized for the incorrect answer. The summed theme detection scores at pre-intervention, post-intervention, and 1-week follow-up became the score used in analyses examining theme detection rates.

**Microaggression accuracy.** As participants could select multiple answers for category and theme, it was plausible that participants' detection scores could be high simply because they chose all of the possible answers or enough that they were likely to guess correctly. To provide information on accuracy of participants' answers, accuracy scores were created. An accuracy score was calculated as the number of correct answers minus the sum of incorrect answers. All answers given by participants were marked as selected (1) and not selected (0). For example, when selecting the answer for category, participants had four options: microinsult, microassault, microinvalidation, and not sure. If the participant selected microinsult and microinvalidation, the answer was coded as microinsult (1), microassault (0), microinvalidation (1), and not sure (0). If the correct category for a video was microinsult, and the participant selected microinsult and microinvalidation, then the accuracy score was 0 for that video. The correct answer of microinsult (1) minus the sum of the incorrect answers, microassault (0) + microinvalidation (1) + not sure (0) = 0.

Similarly, when selecting the answer for theme, participants had 10 options: ascription of intelligence, second-class citizen, pathologizing cultural values, assumption of criminality, environmental, alien in own land, colorblindness, myth of meritocracy,

denial of individual racism, and not sure. If the participant chose ascription of intelligence and alien in own land, the answer was coded as *ascription of intelligence* (1), *second-class citizen* (0), *pathologizing cultural values* (0), *assumption of criminality* (0), *environmental* (0), *alien in own land* (1), *colorblindness* (0), *myth of meritocracy* (0), *denial of individual racism* (0), and *not sure* (0). If the correct theme for a video was assumption of criminality, and the participant selected ascription of intelligence and alien in own land, then the accuracy score was -2 for that video. The correct answer of assumption of criminality (0) minus the sum of the incorrect answers, *ascription of intelligence* (1), *second-class citizen* (0), *pathologizing cultural values* (0), *environmental* (0), *alien in own land* (1), *colorblindness* (0), *myth of meritocracy* (0), *denial of individual racism* (0), and *not sure* (0) = -2.

Negative scores were likely for category accuracy and theme accuracy based on this formula. As negative scores created complexities for analysis and interpretation, scores were then transformed into positive numbers. For category, the initial accuracy scores for each video ranged from -3 to 1. Category scores were then recoded into (-3 = 1), (-2 = 2), (-1 = 3), (0 = 4), and (1 = 5). Following the change, for all seven videos in one set, total category accuracy scores ranged from 7-35 with higher scores indicating higher accuracy.

For theme, initial accuracy scores for each video ranged from -10 to 1. Theme scores were then recoded into (-10 = 1), (-9 = 2), (-8 = 3), (-7 = 4), (-6 = 5), (-5 = 6), (-4 = 7), (-3 = 8), (-2 = 9), (-1 = 10), (0 = 11), (1 = 12), and (2 = 13). Following the change, for all seven videos in one set, total category accuracy scores ranged from 7-91 with higher

scores indicating higher accuracy.

### **Color-Blindness**

The Color-Blind Racial Attitudes Scale (CoBRAS; Neville et al., 2000; Appendix D) is a 20-item measure that assesses perceptions of racial colorblindness on a 6-point Likert-type scale (1 = *strongly disagree* to 6 = *strongly agree*). In addition to a full scale score, the CoBRAS yields three subscale scores: Unawareness of Racial Privilege (seven items; e.g., “White people in the U.S. have certain advantages because of the color of their skin”), Institutional Discrimination (seven items; “Social policies, such as affirmative action, discriminate unfairly against white people”), and Blatant Racial Issues (six items; e.g., “Social problems in the U.S. are rare, isolated situations”). Unawareness of Racial Privilege and Institutional Discrimination scores range from 7-42; Blatant Racial Issues scores range from 6-36. Total scale score ranges from 20-120 with higher total scores indicating stronger perceptions of colorblindness. For the present sample, Cronbach’s alpha coefficient for total score was .89, for Unawareness of Racial Privilege was .87, for Institutional Discrimination was .76, and for Blatant Racial Issues was .91.

### **Control Intervention**

Participants in the control condition read *Positive psychology: Past, present, and (possible) future* by Linley, Joseph, Harrington, and Wood (2015). The 13-page article provided information regarding the history of positive psychology, definitions and taxonomic classifications of positive psychology, and suggestions for future directions of research and application of this information. The article was chosen to reflect the content

structure of the D. W. Sue et al. (2007) article to provide a similar reading experience regarding content completely devoid of racism or microaggressions. A six-question questionnaire consisting of *true* (1) and *false* (2) and multiple-choice questions followed the article assessing reading comprehension and engagement, with scores ranging from 0 - 6 (0 = *none correct*, 6 = *all correct*; Appendix E).

### **Low-Exposure Intervention**

Participants in the low-exposure condition read the article *Racial microaggressions in everyday life: Implications for clinical practice* by D. W. Sue et al. (2007). The 17-page article provides information regarding the history of racism, definitions and taxonomic classifications of racial and ethnic microaggressions, implications of microaggressions, and suggestions for future directions of research and application of this information. A six-question questionnaire consisting of *true* (1) and *false* (2) and multiple-choice questions followed the article assessing reading comprehension and engagement, with scores ranging from 0-6 (0 = *none correct*, 6 = *all correct*; Appendix F).

### **High-Exposure Intervention**

Participants randomly assigned to high-exposure condition (see Procedures) viewed one of two microaggression training intervention videos. Visible ethnic minority leaders, one woman of color and one man of color, each led a video. Having a visible ethnic minority leader was thought to increase the audience perception of leader expertise (Littleford, Ong, Tseng, Milliken, & Humy, 2010) and in an attempt to not a commit a

racial microaggression by ascribing a White leader in the power role of expert of racial and ethnic minority experiences. The microaggression training intervention videos lasted approximately one hour. The final videos contained PowerPoint slides spliced throughout the video so that the viewer saw the intervention leader teaching the content and the actual content as it was taught.

Videos were filmed in the same conference room for both presenters. The presentation content was the same in each intervention. The woman of color leader taught to a group of three pre-selected White audience members. The man of color leader taught to a group of two pre-selected White audience members. In each intervention, the audience members were decoys and were directed to ask questions throughout the presentation. Questions were not predetermined so each video intervention contained different audience questions and responses from the leaders. The presentation provided information on the following topics in the following order: objectives and ground rules, brief history of racism with emphasis on the development and occurrence of modern racism, a definition and taxonomy of racial microaggressions (D. W. Sue et al., 2007), and physical and mental health impacts of racial microaggressions. The presentation utilized pictures and video clip examples of racial microaggressions from television shows, movies, and web-based programming. The use of media in multicultural education has shown to have positive reception and outcomes in multicultural education and awareness (Soble et al., 2011; Tyler & Guth, 1999; Villalba & Redmond, 2008). See Appendix G for PowerPoint slides of the content.

### **Intervention Satisfaction**

The Intervention Satisfaction Questionnaire was developed for the purpose of this study (Appendix H). The questionnaire has 10 items rated on a 7-point Likert-type scale (1 = *strongly disagree*, 7 = *strongly agree*) assessing overall satisfaction with the intervention, perceived usefulness and relevance of the training, perceptions of leader competence, and change in perceived knowledge of microaggressions. The Intervention Satisfaction Questionnaire was only given to participants in the high-exposure condition. Total scores ranged from 14 to 98, with higher scores indicating higher satisfaction. For this sample, Cronbach's alpha was .94.

## **Procedure**

### **Recruitment**

Participants were recruited via multiple methods including online advertisement on the university approved webpage, through emails to instructors, and through flyers posted on campus. Recruitment occurred between January 1, 2017, to April, 28, 2017. All participants were given course credit for participation in the pre- and post- intervention times. Participants who completed the 1-week follow-up were compensated with a \$10 Amazon gift card.

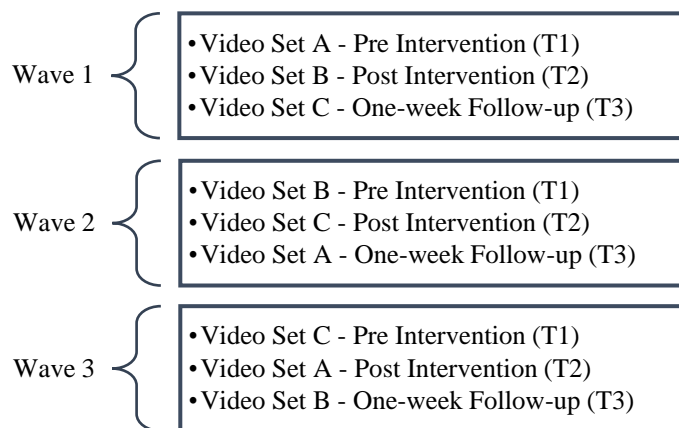
### **Data Collection**

Data collection occurred between January 23, 2017, to April 28, 2017. All participants completed the Contact Form. Within 24 hours of completing the Contact Form, participants were randomly assigned into one of three exposure conditions. All

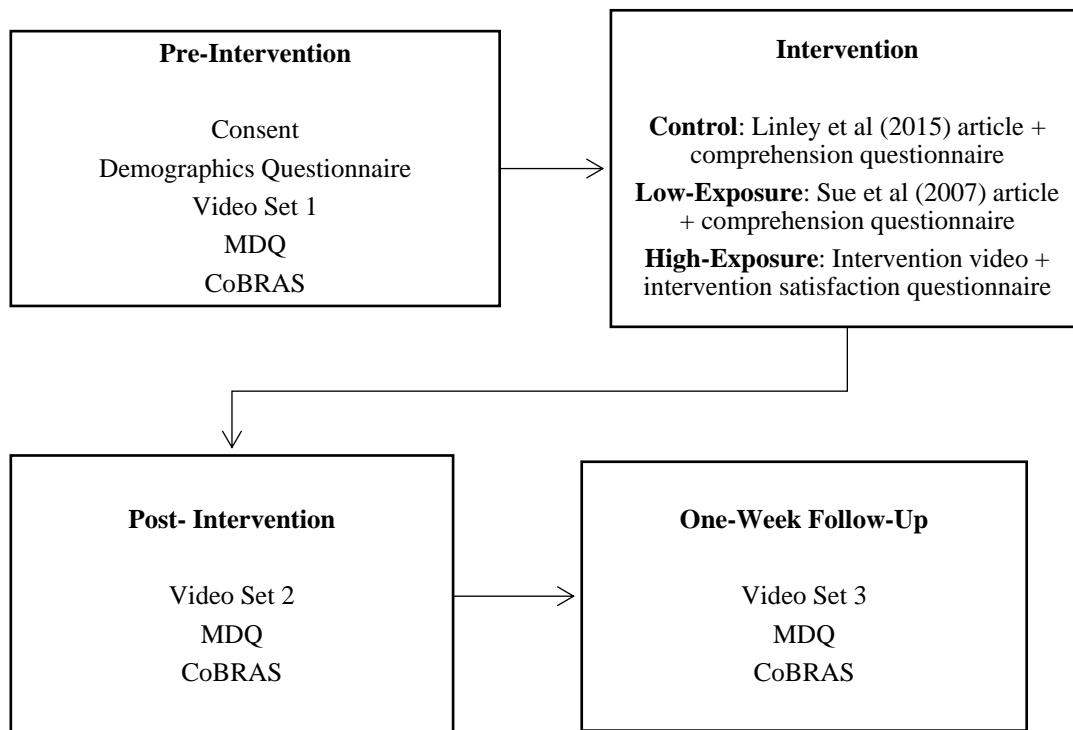
participants provided consent for participation before being able to access study materials. Data was collected in three waves. The purpose of data collection waves was to counter balance the order of the video sets. Specifically, for Wave 1, participants viewed video set A for the pretest, video set B for the posttest, and video set C for the 1-week follow-up. Participants in Wave 2 viewed video set B for the pretest, video set C for the posttest, and video set A for the 1-week follow-up. Participants in Wave 3 viewed video set C for the pretest, video set A for the posttest, and video set B for the 1-week follow-up. For figural depiction, see Figure 2.

### Condition Participation

Total time to completion was one and a half hours to two hours for all conditions. One week following initial participation, participants were given the opportunity to complete a brief follow-up survey taking approximately 20 to 30 minutes to complete. For list of measures and order of deliverance of measures, see Figure 3.



*Figure 2.* Data wave collection. This figure depicts the order in which video sets were delivered to participants based on data wave assignment.



*Figure 3.* Measure completion flow. This figure depicts the order in which participants completed each measure including condition measures.



## **CHAPTER IV**

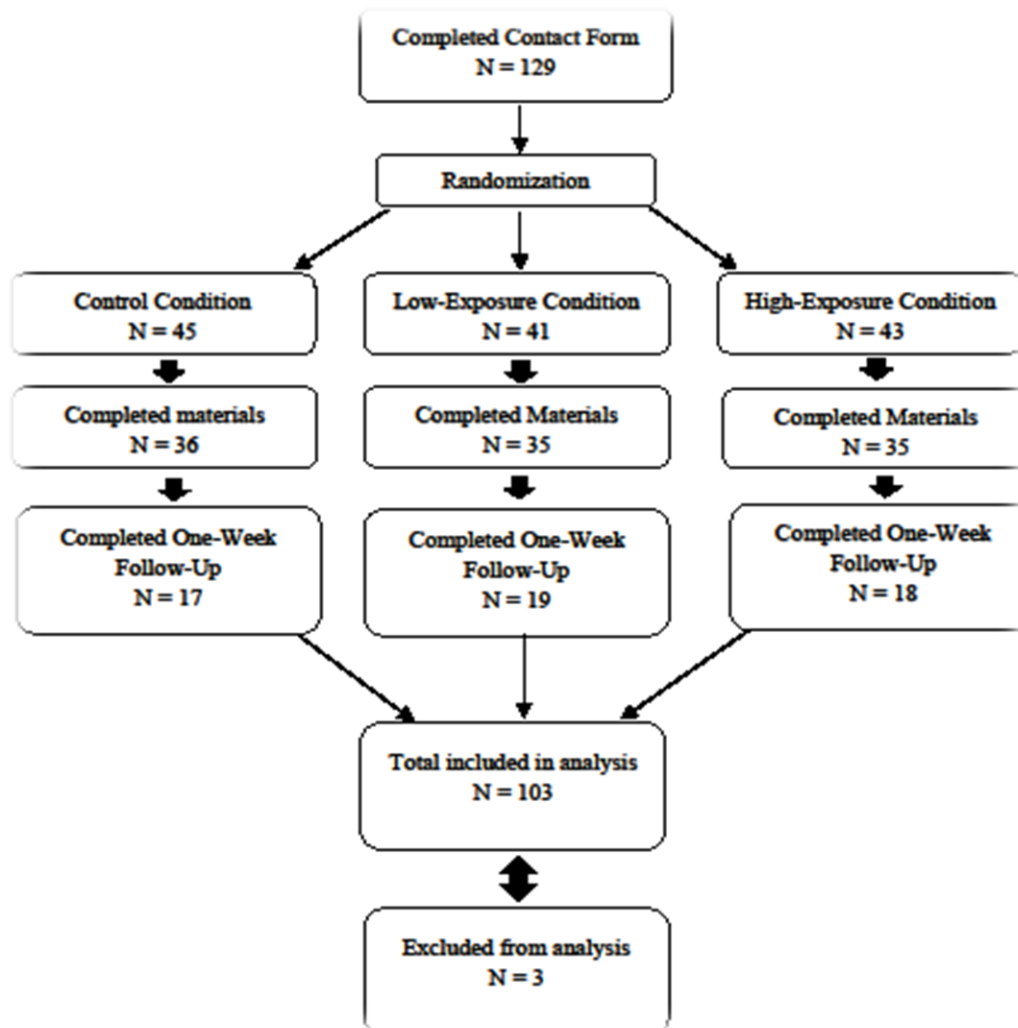
### **RESULTS**

#### **Sample**

A total of 129 individuals completed the Contact Form and were randomly assigned into one of three conditions. A total of 106 participants completed some or all of the pre-intervention and post-intervention materials. One participant was removed from statistical analyses because only the pre-intervention materials were completed. Two participants were removed from the statistical analyses because they completed all of the materials in under 25 minutes indicating little engagement with the materials. A total of 103 participants completed all of the pre-intervention and post-intervention materials and were included in the statistical analyses. A total of 102 participants were sent 1-week follow-up survey materials. Of the 102 sent out, 54 participants completed all of the 1-week follow-up materials and were included in the statistical analyses. See Figure 4 for participant flow.

#### **Missing Data**

Exploratory analyses were conducted to assess for missing data. For each measure, only one item on the measure was allowed to have missing data and be kept in the statistical analyses. None of the 103 pre-intervention and post-intervention participants or the 54 one-week follow-up participants had more than one item of missing data (e.g., one item from one of the CoBRAS unanswered, one video did not load and



*Figure 4.* Participant flow. This figure depicts participant flow from initial contact to analysis.

data was unreported). Missing data was not converted but remained missing from the total scores (e.g., CoBRAS total score, microaggression detection score).

### Descriptive Statistics

Descriptive statistics were completed to provide a description of the basic features of the data within this study. For information regarding the distribution of participants by

gender across data collection waves and condition, see Table 4. Microaggression detection and accuracy rate central tendencies at pre- and post-intervention are displayed in Table 5, central tendencies for 1-week follow-up are displayed in Table 6. CoBRAS total and subscale pre- and post-intervention central tendencies are displayed in Table 7, and central tendencies for 1-week follow-up are displayed in Table 8. Information regarding the low-exposure and control condition article questionnaires and intervention satisfaction scores are displayed in Tables 9 and 10.

Table 4

*Number of Participants by Data Collection Wave, Condition, and Gender*

Condition	Wave 1	Wave 2	Wave 3	Total
Control	12	11	11	34
Men	4	6	3	13
Women	8	4	8	20
Other	0	1	0	1
Low-exposure	12	10	13	35
Men	6	5	3	14
Women	6	5	10	21
Other	0	0	0	0
High-exposure	11	12	11	34
Men	7	5	1	13
Women	4	7	9	20
Other	0	0	1	1
Total	35	33	35	103

Table 5

*Descriptive Statistics for Pre- and Post-Intervention Detection and Accuracy Scores*

Outcome	N	Pretest		Min-Max	Posttest		Min-Max
		M	SD		M	SD	
MA detection	103	5.00	1.12	2.00-7.00	5.03	1.08	1.00-7.00
Category detection	103	2.81	1.25	0.00-5.00	2.89	1.45	0.00-6.00
Theme detection	103	2.64	1.32	0.00-6.00	2.60	1.38	0.00-6.00
Category accuracy	103	25.08	2.56	18.00-31.00	25.34	2.79	18.00-31.00
Theme accuracy	103	70.70	5.83	46.00-80.00	70.45	5.85	45.00-80.00

*Note.* MA detection, category detection, and theme detection scores ranged from 0-7 with higher scores indicating higher detection rates. Category Accuracy scores ranged from 7-35 with higher scores indicating higher accuracy rates. Theme Accuracy scores ranged from 7-91 with higher scores indicating higher accuracy rates.

Table 6

*Descriptive Statistics for 1-Week Follow-Up Detection and Accuracy Scores*

Outcome	N	1-Week follow-up		Min-Max
		M	SD	
MA detection	55	5.12	1.10	2.00-7.00
Category detection	55	2.94	1.36	1.00-6.00
Theme detection	55	2.67	1.33	0.00-6.00
Category accuracy	55	25.27	3.03	16.00-31.00
Theme accuracy	55	69.90	7.80	40.00-79.00

*Note:* MA Detection, Category Detection, and Theme Detection scores ranged from 0-7 with higher scores indicating higher detection rates. Category Accuracy scores ranged from 7-35 with higher scores indicating higher accuracy rates. Theme Accuracy scores ranged from 7-91 with higher scores indicating higher accuracy rates.

Table 7

*Descriptive Statistics for Pre- and Post-Intervention CoBRAS Scores*

Outcome	N	Pretest		Min-Max	Posttest		Min-Max
		M	SD		M	SD	
CoBRAS total	103	63.23	15.38	24-103	61.67	15.65	20-100
Unawareness of racial privilege	103	26.67	7.51	7-42	25.51	7.87	7-42
Institutional discrimination	103	22.52	6.29	9-38	22.19	5.84	7-38
Blatant racial discrimination	103	14.04	4.56	6-23	13.96	4.71	6-23

*Note.* Unawareness of Racial Privilege and Institutional Discrimination scores range from 7-42; Blatant Racial Issues scores range from 6-36. Total scale score ranges from 20-120 with higher total scores indicating stronger perceptions of colorblindness.

Table 8

*Descriptive Statistics for 1-Week Follow-Up CoBRAS Scores*

Outcome	N	1-week follow-up		Min-Max
		M	SD	
CoBRAS total	54	61.89	18.73	21-99
Unawareness of racial privilege	54	26.04	8.71	7-42
Institutional discrimination	54	21.92	6.93	7-38
Blatant racial discrimination	54	13.93	5.63	6-30

*Note.* Unawareness of racial privilege and institutional discrimination scores range from 7-42; Blatant Racial Issues scores range from 6-36. Total scale score ranges from 20-120 with higher total scores indicating stronger perceptions of colorblindness.

Table 9

*Descriptive Statistics for Low-Exposure and Control Condition Quiz Total Scores*

Outcome	N	M	SD	Min-Max
Low-exposure quiz total score	35	5.34	0.802	3-6
Control quiz total score	34	4.53	1.16	1-6

*Note.* Total scores for low-exposure and control quiz ranged from 0-6.

Table 10

*Descriptive Statistics for Intervention Satisfaction Scores*

Outcome	<i>N</i>	<i>M</i>	<i>SD</i>	Min-Max
intervention satisfaction score	34	74.38	15.93	38-98

*Note.* Total scores range from 14-98.

**Normality and Distributions**

To assess distribution, multiple normality assessments were completed.

Numerical assessments were completed by calculating *z*-scores for skewness and kurtosis and the Shapiro-Wilk test of normality (see Tables 11-20). Outliers existed at every level of the statistical analyses. There was one outlier that was particularly consistent in extreme scores due to over endorsement of responses. Preliminary analyses were completed with this outlier removed; however, the removal shifted the data enough that new outliers were created without changing results in any significant manner. Perhaps more importantly, the pattern of response for this outlier did not suggest disengagement but rather over-engagement, which was evident in the care and length of open-ended responses. Because the scores are believed to be true scores, the statistical outlier was retained in analyses.

Overall, as there were mixed results assessing normality and violations of normality and outliers, there was no one adjustment or correction that could be made to the data. Outliers remained as part of the data set. It was decided that due to the small number of participants in each cell, the relatively exploratory nature of the study, and the relative robustness of the chosen statistical models, analyses would be carried out as if distribution were normal.

Table 11

*Z Scores for Skewness and Kurtosis for General Microaggression Detection*

Condition	Statistic	Standard Error	z score
Control			
Pre-Intervention (Time 1)			
Skewness	-0.117	0.550	-0.212
Kurtosis	-1.516	1.063	-0.143
Post-Intervention (Time 2)			
Skewness	0.077	0.550	0.140
Kurtosis	-1.626	1.063	-1.529
Follow-up (Time 3)			
Skewness	-0.620	0.550	-1.127
Kurtosis	-0.332	1.063	-0.312
Low-Exposure			
Pre-Intervention (Time 1)			
Skewness	-0.323	0.512	-0.630
Kurtosis	-0.314	0.992	-0.316
Post-Intervention (Time 2)			
Skewness	0.309	0.512	0.603
Kurtosis	-1.011	0.992	-1.019
Follow-up (Time 3)			
Skewness	-0.502	0.512	-0.980
Kurtosis	-0.197	0.992	-0.198
High-Exposure			
Pre-Intervention (Time 1)			
Skewness	-1.085	0.536	-2.024
Kurtosis	1.262	1.038	1.215
Post-Intervention (Time 2)			
Skewness	-0.238	0.536	-0.444
Kurtosis	-0.49	1.038	-0.472
Follow-up (Time 3)			
Skewness	0.257	0.536	0.479
Kurtosis	-0.534	1.038	-0.514

Table 12

*Shapiro-Wilk Test of Normality for General Microaggression Detection*

Condition	Statistic	<i>df</i>	Significance
Pre-Intervention			
Control	.806	17	.002*
Low-Exposure	.920	20	.098
High-Exposure	.874	18	.021*
Post-Intervention			
Control	.838	17	.007*
Low-Exposure	.851	20	.006*
High-Exposure	.926	18	.167
Follow-Up			
Control	.892	17	.051
Low-Exposure	.900	20	.042*
High-Exposure	.864	18	.014*

\*Indicates violation of assumption of normality at  $p < .05$ .



Table 13

*Z Scores for Skewness and Kurtosis for Microaggression Category Detection*

Condition	Statistic	Standard error	z score
Control			
Pre-Intervention (Time 1)			
Skewness	.124	.550	.225
Kurtosis	-.911	1.063	-.857
Post-Intervention (Time 2)			
Skewness	1.089	.550	1.980
Kurtosis	.604	1.063	.568
Follow-up (Time 3)			
Skewness	.431	.550	.783
Kurtosis	-.866	1.063	-.814
Low-Exposure			
Pre-Intervention (Time 1)			
Skewness	.435	.512	.849
Kurtosis	-.046	.992	-.046
Post-Intervention (Time 2)			
Skewness	-.743	.512	-1.451
Kurtosis	.754	.992	.760
Follow-up (Time 3)			
Skewness	.743	.512	1.451
Kurtosis	.754	.992	.760
High-Exposure			
Pre-Intervention (Time 1)			
Skewness	-.232	.536	-.432
Kurtosis	-1.576	1.038	-1.518
Post-Intervention (Time 2)			
Skewness	-.161	.536	-.300
Kurtosis	-.554	1.038	-.533
Follow-up (Time 3)			
Skewness	.429	.536	.800
Kurtosis	-.745	1.038	-.717

Table 14

*Shapiro-Wilk Test of Normality for Microaggression Category Detection*

Condition	Statistic	<i>df</i>	Significance
Pre-Intervention			
Control	.925	17	.176
Low-exposure	.881	20	.018*
High-exposure	.826	18	.004*
Post-Intervention			
Control	.856	17	.013*
Low-exposure	.916	20	.084
High-exposure	.944	18	.342
Follow-up			
Control	.901	17	.070
Low-exposure	.916	20	.084
High-exposure	.925	18	.162

\*Indicates violation of assumption of normality at  $p < .05$ .

Table 15

*Z Scores for Skewness and Kurtosis for Microaggression Theme Detection*

Condition	Statistic	Standard Error	z score
Control			
Pre-Intervention (Time 1)			
Skewness	.601	.550	1.092
Kurtosis	-.085	1.063	-.079
Post-Intervention (Time 2)			
Skewness	.043	.550	.078
Kurtosis	-.393	1.063	-.369
Follow-up (Time 3)			
Skewness	.228	.550	.414
Kurtosis	-.438	1.063	-.412
Low-Exposure			
Pre-Intervention (Time 1)			
Skewness	.587	.512	1.146
Kurtosis	1.165	.992	1.174
Post-Intervention (Time 2)			
Skewness	.388	.512	.757
Kurtosis	-.753	.992	-.759
Follow-up (Time 3)			
Skewness	.585	.512	1.142
Kurtosis	.533	.992	.537
High-Exposure			
Pre-Intervention (Time 1)			
Skewness	.461	.536	.860
Kurtosis	-.428	1.038	-.412
Post-Intervention (Time 2)			
Skewness	.397	.536	.740
Kurtosis	-.534	1.038	-.514
Follow-up (Time 3)			
Skewness	.659	.536	1.229
Kurtosis	-.796	1.038	-.766

Table 16

*Shapiro-Wilk Test of Normality for Microaggression Theme Detection*

Condition	Statistic	<i>df</i>	Significance
Pre-Intervention			
Control	.862	17	.016*
Low-exposure	.869	20	.011*
High-exposure	.928	18	.176
Post-Intervention			
Control	.916	17	.124
Low-exposure	.904	20	.05*
High-exposure	.921	18	.137
Follow-up			
Control	.962	17	.661
Low-exposure	.898	20	.038*
High-exposure	.840	18	.006*

\*Indicates violation of assumption of normality at  $p < .05$ .

Table 17

*Z Scores for Skewness and Kurtosis for Microaggression Category Accuracy*

Condition	Statistic	Standard Error	z score
Control			
Pre-Intervention (Time 1)			
Skewness	-1.235	.550	-2.245
Kurtosis	2.465	1.063	2.318*
Post-Intervention (Time 2)			
Skewness	-.429	.550	-.780
Kurtosis	-.251	1.063	-.236
Follow-up (Time 3)			
Skewness	.361	.550	.656
Kurtosis	-1.147	1.063	-1.079
Low-Exposure			
Pre-Intervention (Time 1)			
Skewness	-.524	.512	-.1023
Kurtosis	.109	.992	.109
Post-Intervention (Time 2)			
Skewness	-.279	.512	-.544
Kurtosis	-.453	1.063	-.236
Follow-up (Time 3)			
Skewness	-1.899	.512	-3.708*
Kurtosis	3.085	.922	3.109*
High-Exposure			
Pre-Intervention (Time 1)			
Skewness	-.470	.536	-.876
Kurtosis	.132	1.063	.127
Post-Intervention (Time 2)			
Skewness	-.221	.536	-.401
Kurtosis	-.798	1.038	-.768
Follow-up (Time 3)			
Skewness	-.291	.536	-.542
Kurtosis	-.022	1.038	-.021

\*Values outside of z score of  $\pm 2.58$  with .01 significance indicates the value is not normally distributed

Table 18

*Shapiro-Wilk Test of Normality for Microaggression Category Accuracy*

Condition	Statistic	df	Significance
Pre-Intervention			
Control	.887	17	.041*
Low-exposure	.926	20	.128
High-exposure	.955	18	.507
Post-Intervention			
Control	.969	17	.807
Low-exposure	.971	20	.784
High-exposure	.945	18	.355
Follow-up			
Control	.896	17	.059
Low-exposure	.740	20	.000*
High-exposure	.984	18	.982

\*Indicates violation of assumption of normality at  $p < .05$ .

Table 19

*Z Scores for Skewness and Kurtosis for Microaggression Theme Accuracy*

Condition	Statistic	Standard Error	z score
Control			
Pre-Intervention (Time 1)			
Skewness	-2.022	.550	-3.676*
Kurtosis	5.170	1.063	4.863*
Post-Intervention (Time 2)			
Skewness	-2.177	.550	-3.958*
Kurtosis	4.804	1.063	4.519*
Follow-up (Time 3)			
Skewness	-1.628	.550	-2.96*
Kurtosis	3.162	1.063	2.97*
Low-Exposure			
Pre-Intervention (Time 1)			
Skewness	-.422	.512	-.824
Kurtosis	-.273	.992	-.275
Post-Intervention (Time 2)			
Skewness	-1.161	.512	-2.267*
Kurtosis	.641	.992	.646
Follow-up (Time 3)			
Skewness	-2.268	.512	-4.429*
Kurtosis	6.756	.992	6.810*
High-Exposure			
Pre-Intervention (Time 1)			
Skewness	-.785	.536	-1.464
Kurtosis	-.874	1.038	-.842
Post-Intervention (Time 2)			
Skewness	-1.063	.536	-1.983
Kurtosis	.125	1.038	.120
Follow-up (Time 3)			
Skewness	-.536	.536	-1.000
Kurtosis	.564	1.038	-.543

\*Values outside of z-score of  $\pm 2.58$  with .01 significance indicates the value is not normally distributed

Table 20

*Shapiro-Wilk Test of Normality for Microaggression Theme Accuracy*

Condition	Statistic	df	Significance
Pre-Intervention			
Control	.806	17	.002*
Low-exposure	.971	20	.772
High-exposure	.842	18	.006*
Post-Intervention			
Control	.716	17	.000*
Low-exposure	.879	20	.017*
High-exposure	.865	18	.014*
Follow-up			
Control	.840	17	.007*
Low-exposure	.784	20	.000*
High-exposure	.942	18	.318

\*Indicates violation of assumption of normality at  $p < .05$ .

### Research Question 1

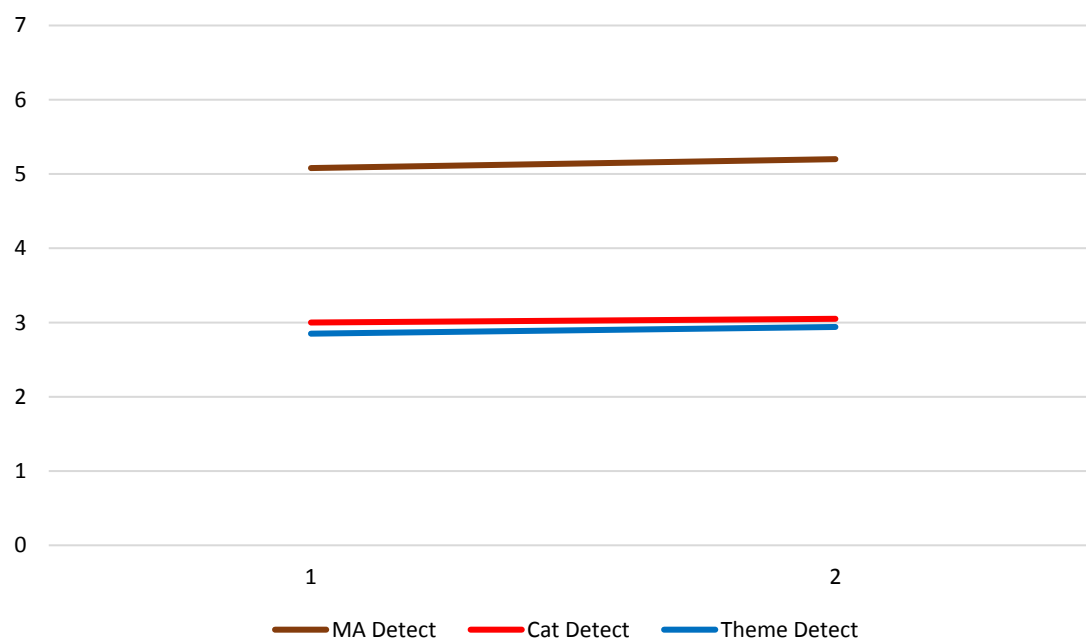
Research question 1 was: Will an intervention designed to increase knowledge about racial and ethnic microaggressions result in higher detection and accuracy for racial and ethnic microaggressions in White college students? To answer this question, a series of paired-samples  $t$  tests were completed for the high-exposure (i.e., intervention) condition examining any changes from pre-intervention to post-intervention detection and accuracy rates. There were no significant mean differences between pre- and post-intervention scores for general microaggression detection, category and theme detection, or for category and theme accuracy. See Table 21 and Figures 5-7.



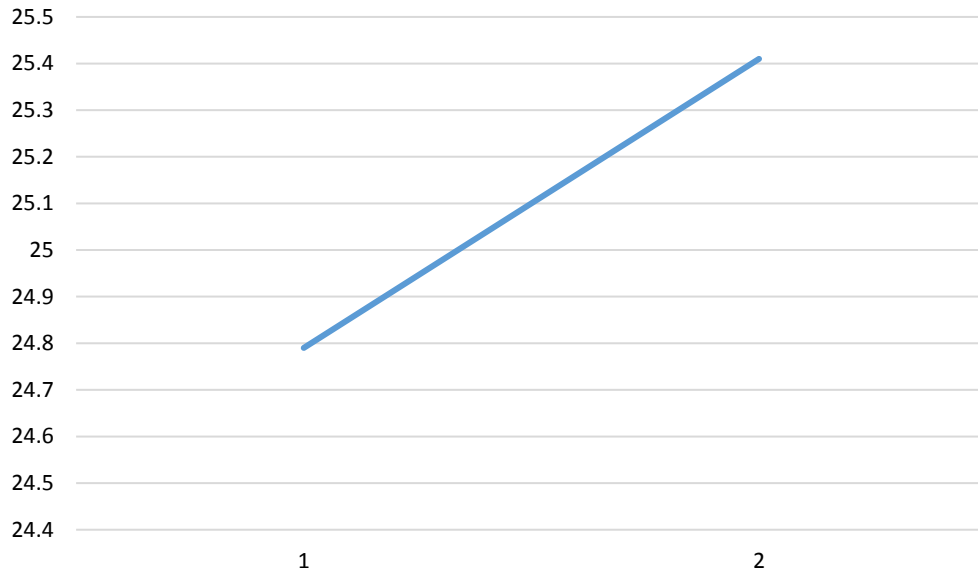
Table 21

*T Test Results for High-Exposure Condition Detection and Accuracy*

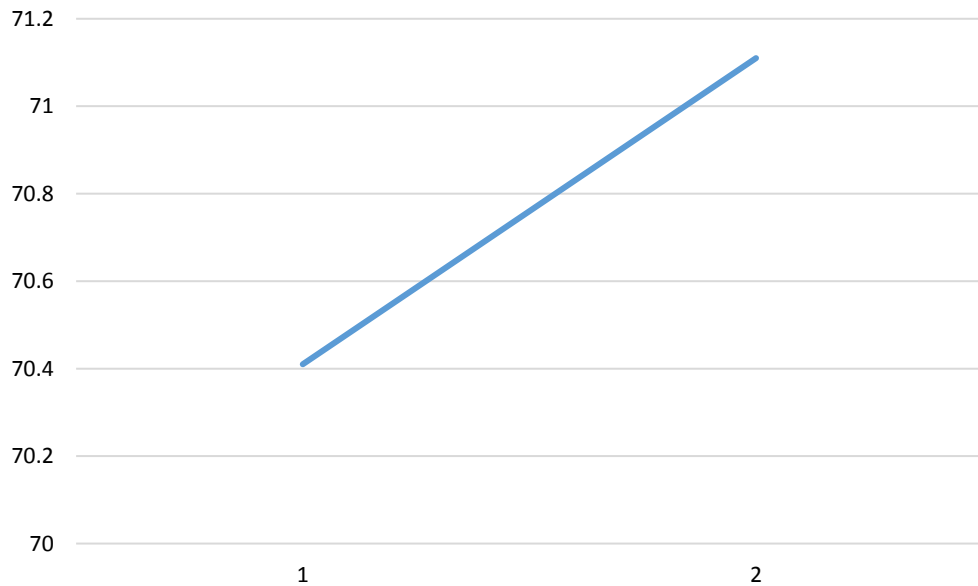
Outcome	Pretest		Posttest		N	95% CI for mean difference	t	df
	M	SD	M	SD				
MA Detection	5.08	1.13	5.20	1.06	34	-.57, .33	-0.529	33
Category Detection	3.00	1.45	3.05	1.51	34	-.63, .51	-0.208	33
Category Accuracy	24.79	2.77	25.41	2.57	34	-1.89, .65	-0.986	33
Theme Detection	2.85	1.54	2.94	1.66	34	-.78, .61	-0.257	33
Theme Accuracy	70.41	6.24	71.11	5.03	34	-2.83, 1.42	-0.674	33



*Figure 5.* Pre- and post- intervention detection scores for high-exposure condition. This figure depicts change in microaggression, category, and theme detection rates at pre- and post-intervention for participants in the high-exposure condition. MA Detect = General Microaggression Detection, Cat Detect = Category Detection, Theme Detect = Theme Detection. All scores range from 0 – 7 with higher scores indicating higher detection rates.



*Figure 6.* Pre- and post- intervention category accuracy scores for high-exposure condition. This figure depicts change in pre- and post-intervention category accuracy scores for participants in the high-exposure condition. Scores range from 7 – 35 with higher scores indicating higher accuracy rates.



*Figure 7.* Pre- and post- intervention theme accuracy scores for high-exposure condition. This figure depicts change in pre- and post- intervention theme accuracy scores for participants in the high-exposure condition. Scores range from 7 – 91 with higher scores indicating higher accuracy rates.

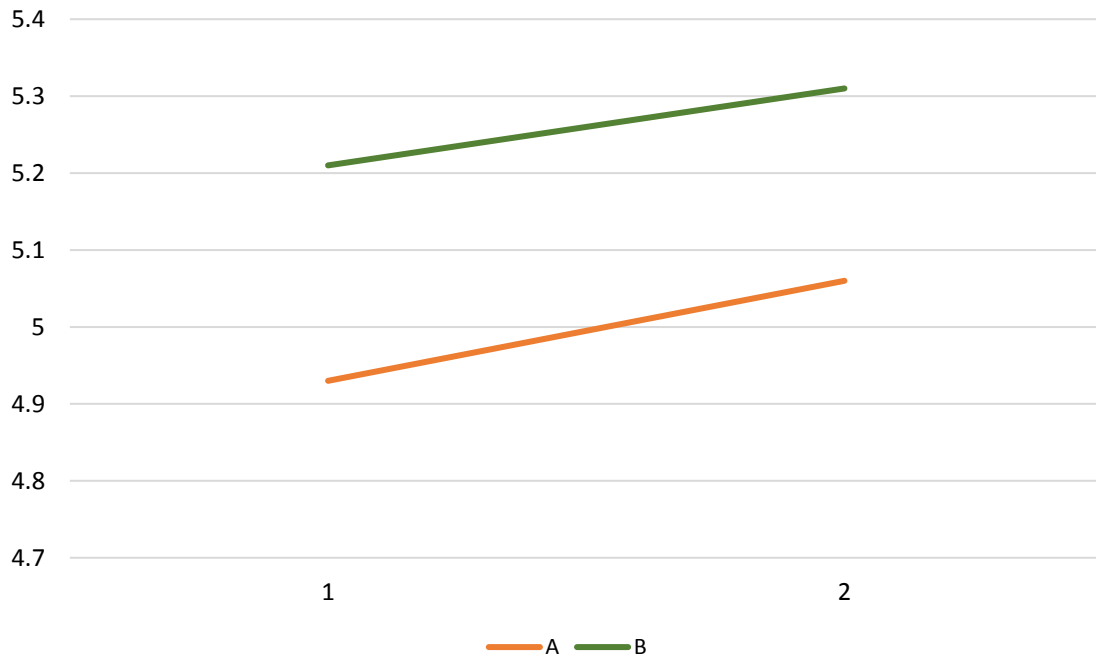
### Posthoc Analyses

Repeated measures ANOVAs were completed to examine differences in detection and accuracy rates at pre- and post- intervention times between intervention leaders. There was no significant interaction between time and intervention leader for general microaggression detection. There were no significant main effects for time or intervention leader. See Table 22 and Figure 8. There were no significant main effects nor a significant interaction between time and intervention leader for category detection. See Table 23 and Figure 9. There were no significant main effects nor a significant interaction between time and intervention leader for theme detection. See Table 24 and Figure 10. Similarly, there were no significant main effects nor a significant interaction between time and intervention leader for category accuracy. See Table 25 and Figure 11. There were no significant main effects nor a significant interaction between time and intervention leader for theme accuracy. See Table 26 and Figure 12.

Table 22

*RM-ANOVA for Microaggression Detection for Leader by Time*

MA Detect	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	$\eta^2_p$
Time	0.239	1	0.239	0.275	.604	.009
Condition	1.161	1	1.161	0.723	.401	.022
Time x condition	0.003	1	0.003	0.004	.951	.000
Error	27.761	32	0.868			

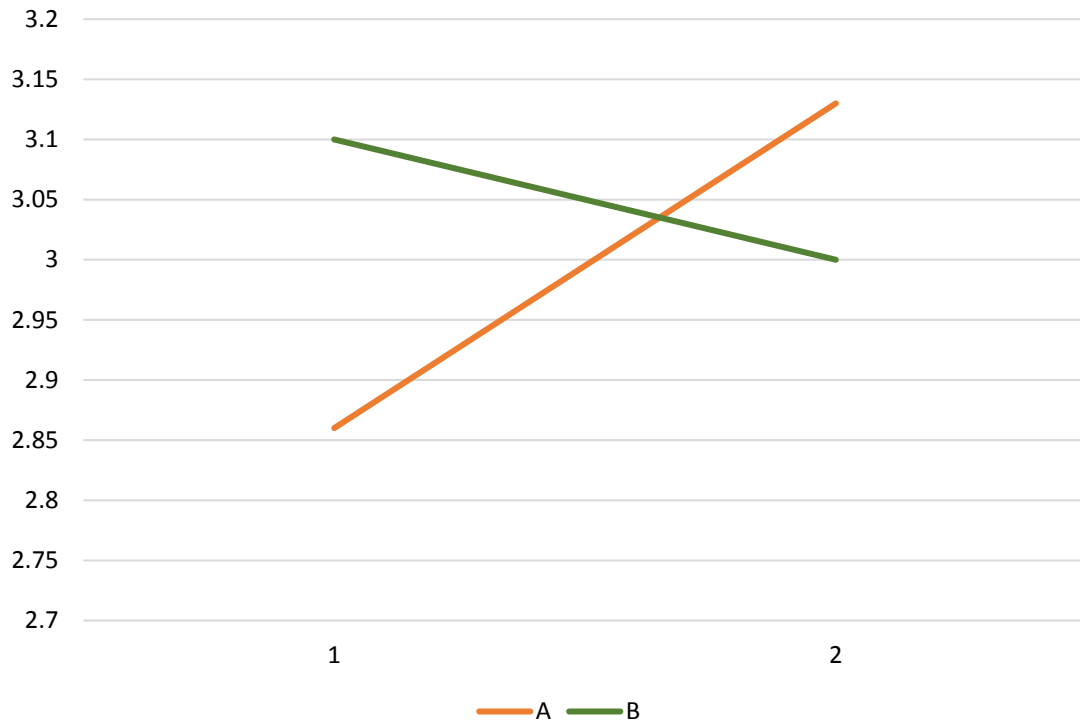


*Figure 8.* General microaggression detection rate across time and intervention leader. This figure depicts general microaggression detection scores from pre- to post-intervention by intervention leader (A or B). 1 = pre-intervention, 2 = post-intervention. All scores range from 0 – 7 with higher scores indicating higher detection rates.

Table 23

*RM-ANOVA for Category Detection for Leader by Time*

MA Detect	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	$\eta^2_p$
Time	0.109	1	0.109	0.079	.781	.022
Condition	0.046	1	0.046	0.015	.904	.000
Time x Condition	0.580	1	0.580	0.418	.522	.013
Error	44.361	32	1.386			

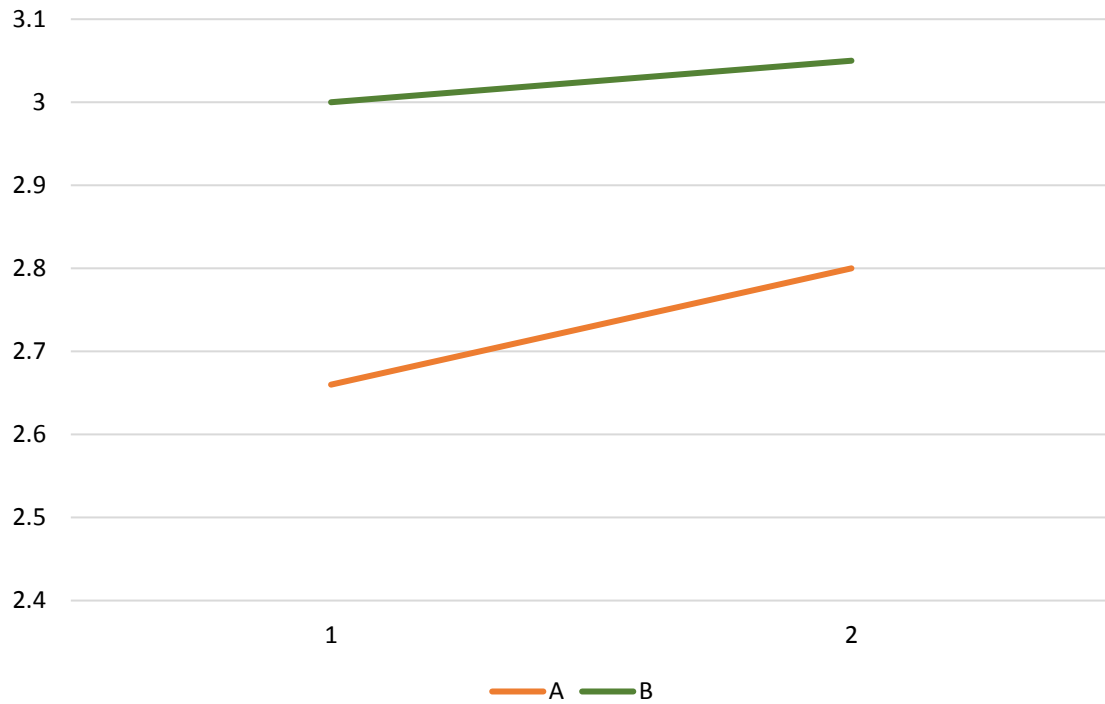


*Figure 9.* Category detection across time and intervention leader. This figure depicts category detection scores pre- to post-intervention by intervention leader (A or B). 1 = pre-intervention, 2 = post-intervention. All scores range from 0 – 7 with higher scores indicating higher detection rates.

Table 24

*RM-ANOVA for Theme Detection for Leader by Time*

MA Detect	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	$\eta^2_p$
Time	0.145	1	0.145	.070	.793	.002
Condition	1.439	1	1.439	.450	.507	.014
Time x Condition	0.027	1	0.027	.013	.909	.000
Error	66.34	32	2.073			

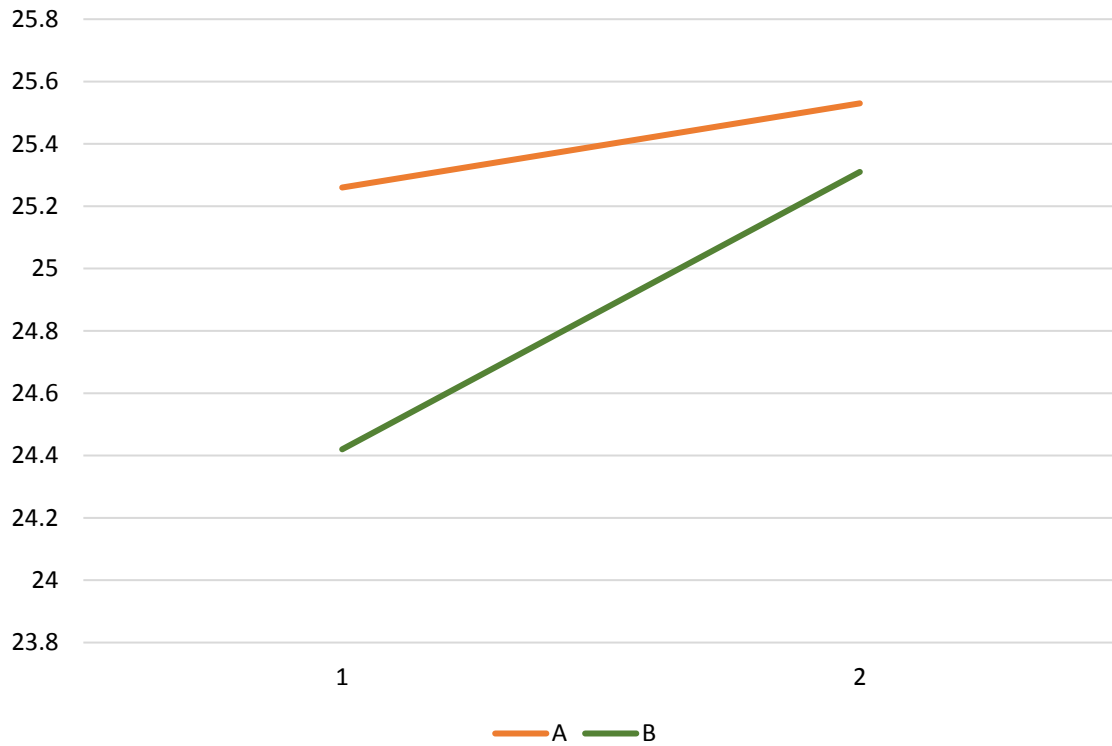


*Figure 10.* Theme detection across time and intervention leader. This figure depicts theme detection scores from pre- to post- intervention by intervention leader (A or B). 1 = pre-intervention, 2 = post-intervention. All scores range from 0 – 7 with higher scores indicating higher detection rates.

Table 25

*RM-ANOVA for Category Accuracy for Leader by Time*

MA Detect	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	$\eta^2_p$
Time	5.653	1	5.653	0.828	.370	.025
Condition	4.737	1	4.737	0.614	.439	.019
Time x Condition	1.653	1	1.653	0.242	.626	.008
Error	218.361	32	6.824			

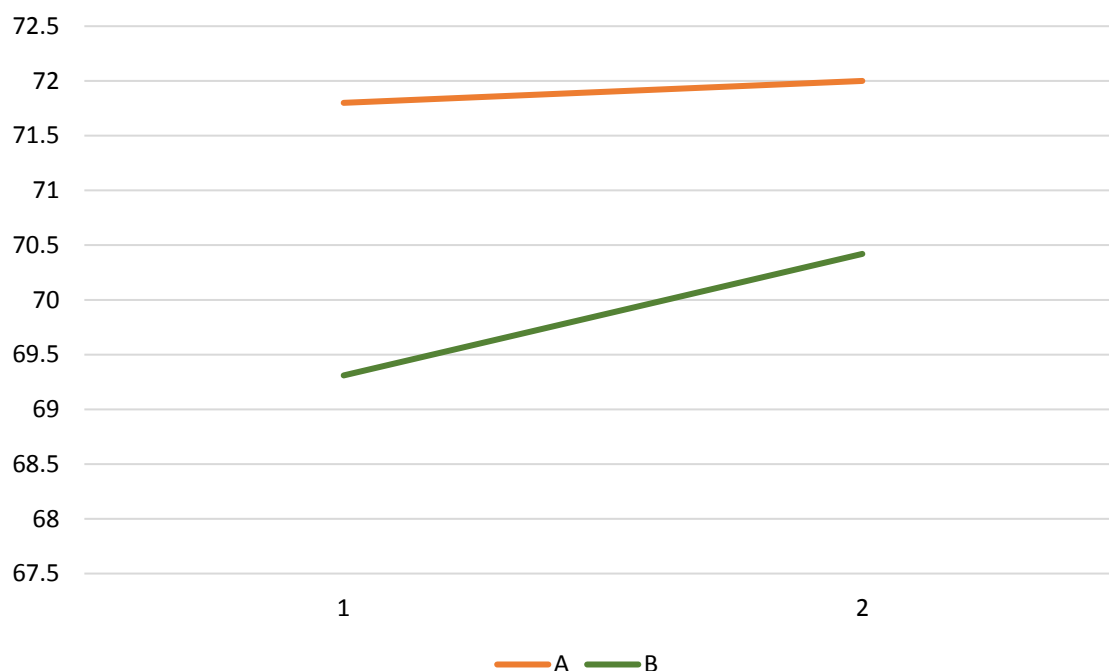


*Figure 11.* Category accuracy across time and intervention leader. This figure depicts category accuracy scores from pre- to post- intervention by intervention leader (A or B). 1 = pre-intervention, 2 = post-intervention. Scores range from 7 – 35 with higher scores indicating higher accuracy rates.

Table 26

*RM-ANOVA for Theme Accuracy for Leader by Time*

MA Detect	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	$\eta^2_p$
Time	7.141	1	7.141	0.373	.546	.012
Condition	69.193	1	69.193	1.539	.223	.046
Time x Condition	3.435	1	3.435	0.180	.675	.006
Error	612.095	32	19.128			



*Figure 12.* Theme accuracy across time and intervention leader. This figure depicts theme accuracy scores pre- to post- intervention by intervention leader (A or B). 1 = pre-intervention, 2 = post-intervention. Scores range from 7 – 91 with higher scores indicating higher accuracy.

The calculation of accuracy scores led to further exploration of the participant's pattern of responses to the videos. There was a concern that participants were not selective in their responses due to the ability to select multiple responses. Indeed, participants showed a tendency to over-select yes that did not contain a microaggression indicate that participants overwhelmingly selected yes for their answer. This was particularly striking in the non-microaggression videos where, despite the correct response being no, the vast majority of participants selected yes for the videos (65% - 83%; see Table 27 for responses by video types; see Table 3 for video categorization and themes).



Table 27

*Yes/No Responses by Video Types*

Video type	No	Yes	Missing Data	Total
Non-microaggression videos				
The Big Bang Theory	14	72	0	86
Reverse Racism	22	63	0	85
Morgan Freeman	31	58	1	90
Microassault videos				
Crank 2	8	77	1	86
Transformers	28	54	3	85
Achmed	10	74	1	85
Asians in the Library	0	90	0	90
Jose the Jalapeno	1	78	11	90
Microinsult videos				
When Bass Drops	20	66	0	86
2 Broke Girls	0	85	1	86
Harold & Kumar	2	82	1	85
Criminal Minds	10	75	0	85
Dem White Boyz	21	69	0	90
Crash	2	87	1	90
Microinvalidation videos				
I'm Not Racist	1	84	1	86
Proud to be White	31	55	0	86
Pitch Perfect	13	72	1	86
Dr. Phil 1	40	45	0	85
South Park	46	30	9	85
Where Are You From	2	88	0	90
School House Rock	51	38	1	90

*Note.* Total participant numbers reflect pre-, post-, and 1-week follow-up intervention scores. Total numbers are out of 103 total participants. There was not 100% completion due to 1-week follow-up scores. Missing data indicate did not complete item for varying reasons but was presented with item.

## Research Question 2

Research question 2 was: Will there be a difference in detection and accuracy between high-exposure, low-exposure, and control interventions in White college students? Two way mixed ANOVAs were used to compare mean differences between groups in general microaggressions detection, category detection and accuracy, and theme detection and accuracy.

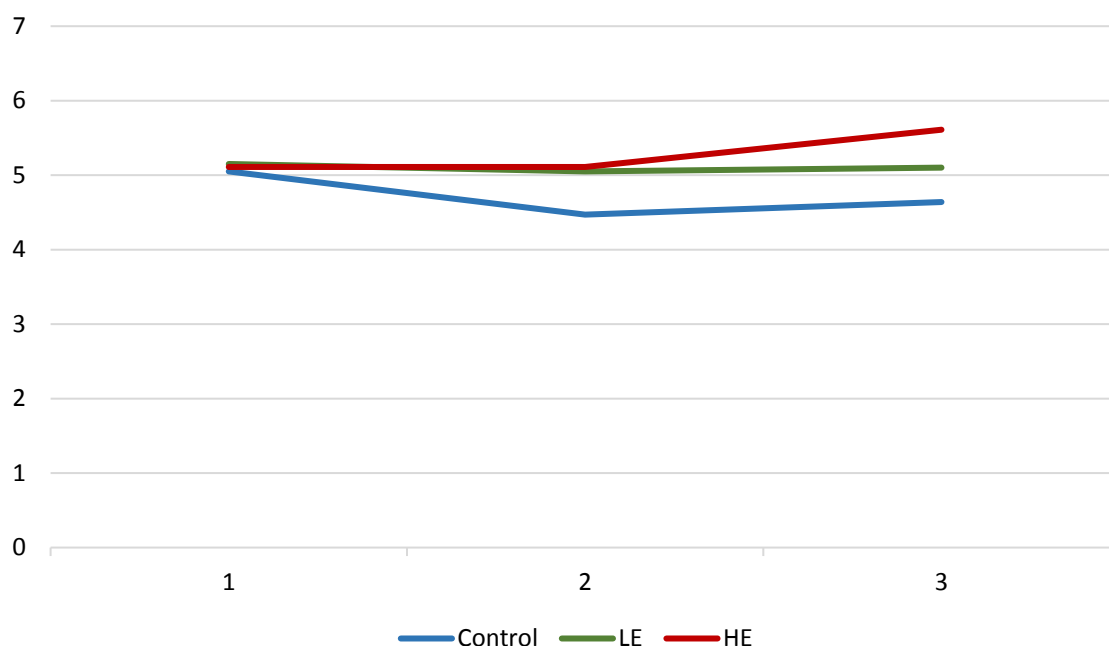
### General Microaggression Detection

General microaggression detection compared mean differences between control, low-exposure, and high-exposure (condition) groups at pre-intervention, post-intervention, and follow-up times (time). Mauchly's test of sphericity indicated that the assumption of sphericity was met for the two-way interaction,  $\chi^2(2) = .79, p = .674$ . There was no statistically significant interaction between the condition and time on general microaggression detection. There was no statistically significant main effect for time or condition for general microaggression detection rates. See Table 28 and Figure 13.

Table 28

#### *RM-ANOVA for Microaggression Detection Across Time and Condition*

MA Detect	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	$\eta_p^2$
Time	2.034	2	1.017	1.160	.317	.022
Condition	8.313	2	4.156	2.323	.108	.082
Time x Condition	4.295	4	1.074	1.225	.305	.045
Error	91.135	104	.876			



*Figure 13.* General microaggression detection scores across conditions and time. This figure depicts changes in general microaggression detection scores from pre- to post- to follow-up- intervention times by condition. Note: Control = control condition, LE = low-exposure condition, HE = high-exposure condition. 1 = pre-intervention, 2 = post-intervention, 3 = 1-week follow-up. All scores range from 0 – 7 with higher scores indicating higher detection rates.

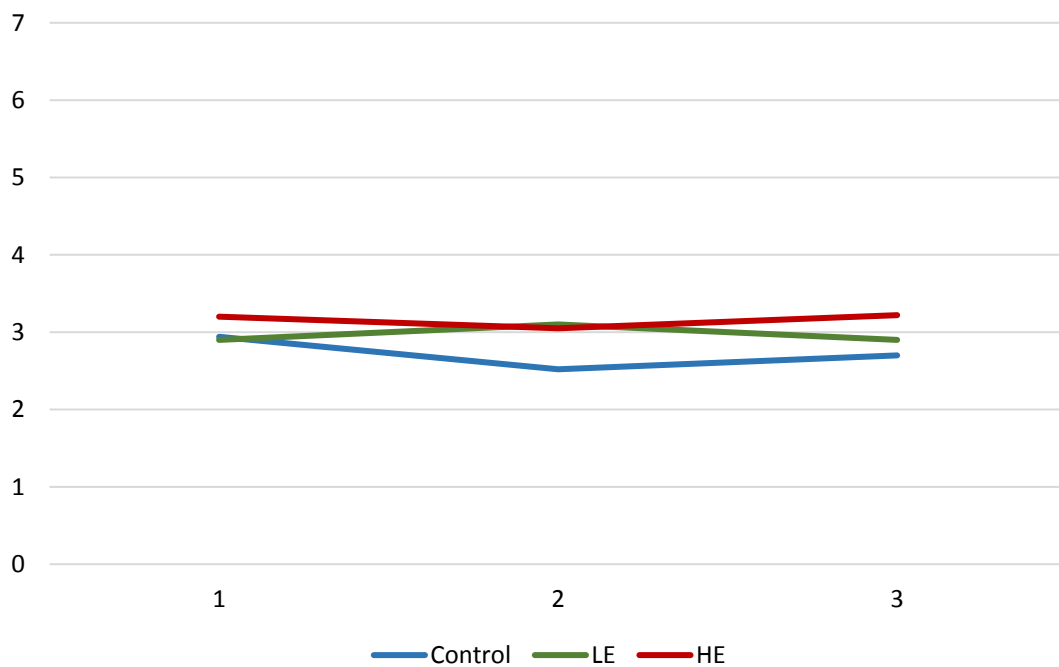
### Microaggression Category Detection

Microaggression category detection compared mean differences between control, low-exposure, and high-exposure (condition) groups at pre-intervention, post-intervention, and follow-up times (time) for category detection (e.g., microinsult, microassault, microinvalidation). Mauchly's test of sphericity indicated that the assumption of sphericity was met for the two-way interaction,  $\chi^2(2) = 1.013, p = .603$ . There was no statistically significant interaction between the condition and time for microaggression category detection rates. There were no main effects for time or condition for microaggression category detection rates. See Table 29 and Figure 14.

Table 29

*RM-ANOVA for Category Detection Across Time and Condition*

Category Detect	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	$\eta^2_p$
Time	0.595	2	0.298	0.238	.789	.005
Condition	5.543	2	2.772	0.785	.461	.029
Time x Condition	1.993	4	0.498	0.398	.810	.015
Error	130.201	104	1.252			



*Figure 14.* Category detection scores across conditions and time. This figure depicts changes in category detection scores from pre- to post- to follow-up- intervention by condition. Control = control condition, LE = low-exposure condition, HE = high-exposure condition. 1 = pre-intervention, 2 = post-intervention, 3 = 1-week follow-up. All scores range from 0 – 7 with higher scores indicating higher detection rates.

### Microaggression Theme Detection

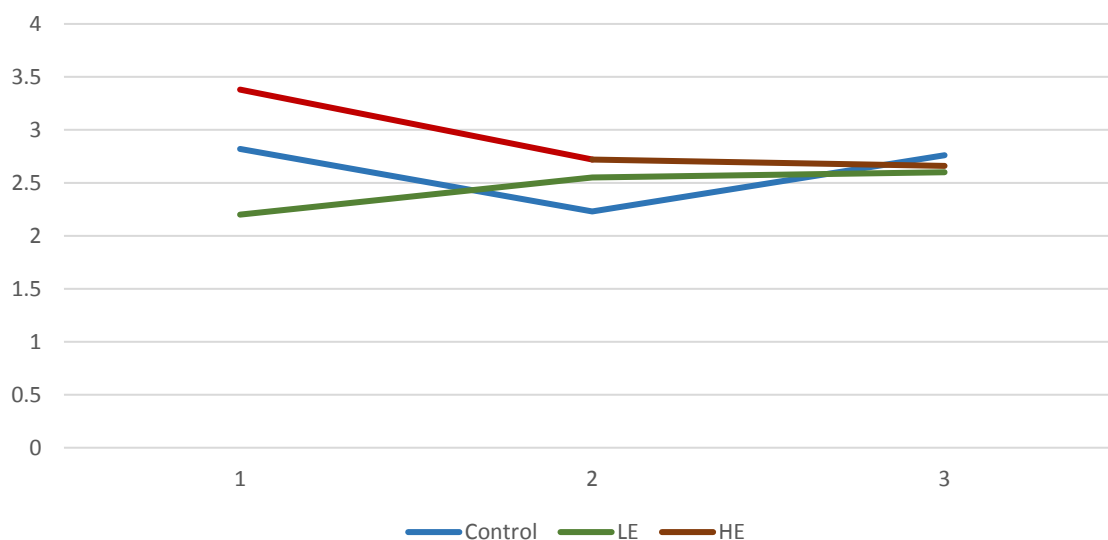
Microaggression theme detection compared mean differences between control, low-exposure, and high-exposure (condition) groups at pre-intervention, post-intervention, and follow-up times (time) for theme detection (e.g., ascription of intelligence, second class citizen, alien in own land). Mauchly's test of sphericity indicated that there was a violation of the assumption of sphericity for the two-way interaction,  $\chi^2(2) = 8.065, p = .018$ . As the estimated epsilon was greater than .75, a Hunyh-Feldt correction was used to determine significance of interaction (Maxwell & Delaney, 2004). There was no significant interaction between condition and time for microaggression theme detection; however, it was trending significant. There were no main effects for time or condition for microaggression theme detection. See Table 30 and Figure 15

Table 30

#### *RM-ANOVA for Theme Detection Across Time and Condition*

Theme Detect	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	$\eta^2_p$
Time	2.511	1.87	1.343	1.360	.261	.025
Condition	6.599	2	3.299	0.878	.422	.033
Time x Condition	9.211	3.739	2.463	2.493	.052*	.088
Error	96.05	97.226	0.988			

*Note.* Because of the violation of assumption of sphericity, scores were based on Hunyh-Feldt correction. Trending significance at  $p < .05$



*Figure 15.* Theme detection across conditions and time. This figure depicts changes in theme detection scores from pre- to post- to follow-up- intervention times by condition. Control = control condition, LE = low-exposure condition, HE = high-exposure condition. 1 = pre-intervention, 2 = post-intervention, 3 = 1-week follow-up. All scores range from 0 – 7 with higher scores indicating higher detection rates.

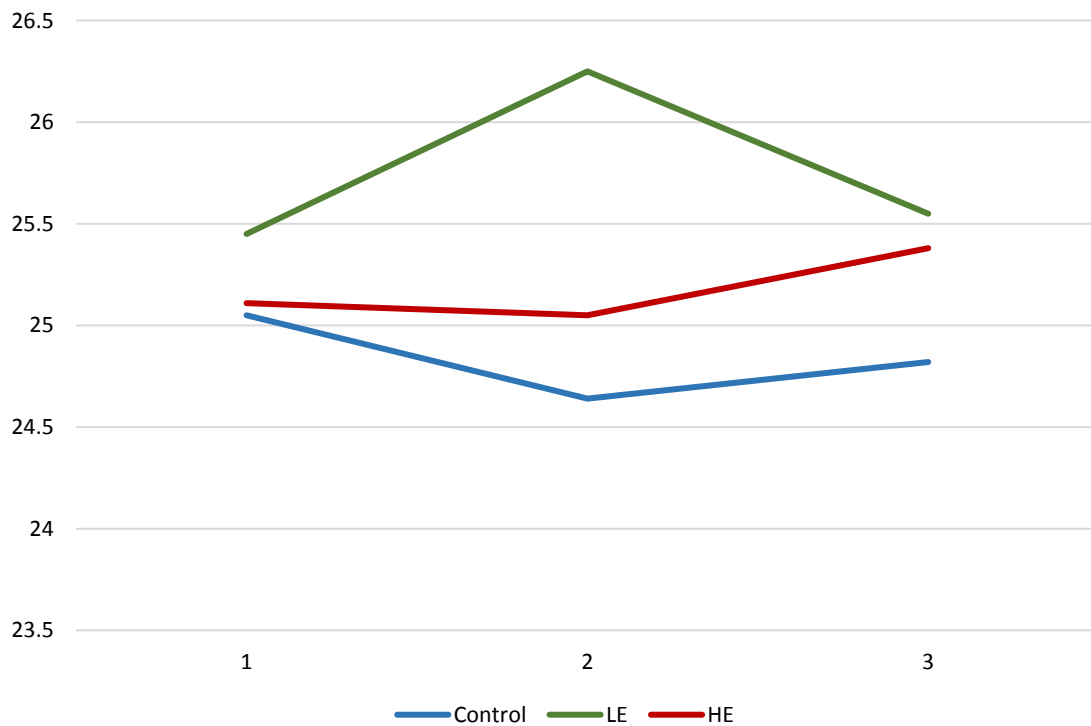
### Microaggression Category Accuracy

Microaggression category accuracy compared mean differences between control, low-exposure, and high-exposure (condition) groups at pre-intervention, post-intervention, and follow-up times (time) for category accuracy (e.g., microinsult, microassault, microinvalidation; see Microaggression Detection and Microaggression Accuracy for accuracy formulation). Mauchly's test of sphericity indicated that the assumption of sphericity was met for the two-way interaction,  $\chi^2(2) = 1.068, p = .586$ . There was no significant interaction between condition and time for microaggression category accuracy. There were no significant main effects for time or condition for microaggression category accuracy. See Table 31 and Figure 16.

Table 31

*RM-ANOVA for Category Accuracy*

Category Accuracy	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	$\eta^2_p$
Time	0.339	2	0.169	0.024	.976	.000
Condition	23.469	2	11.734	1.230	.301	.045
Time x Condition	9.605	4	2.401	0.339	.851	.013
Error	735.801	104	7.075			



*Figure 16.* Category accuracy across conditions and time. This figure depicts changes in category accuracy from pre- to post- to follow-up intervention times by condition. Control = control condition, LE = low-exposure condition, HE = high-exposure condition. 1 = pre-intervention, 2 = post-intervention, 3 = 1-week follow-up. Scores range from 7 – 35 with higher scores indicating higher accuracy rates.

### Microaggression Theme Accuracy

Microaggression theme accuracy compared mean differences between control, low-exposure, and high-exposure (condition) groups at pre-intervention, post-intervention, and follow-up times (time) for theme accuracy (e.g., ascription of intelligence, second class citizen, alien in own land). Mauchly's test of sphericity indicated that the assumption of sphericity was met for the two-way interaction,  $\chi^2(2) = 3.07, p = .215$ . There was no significant interaction between condition and time for theme accuracy. There were no significant main effects for time or condition for theme accuracy. See Table 32 and Figure 17.

### Post-Hoc Analyses

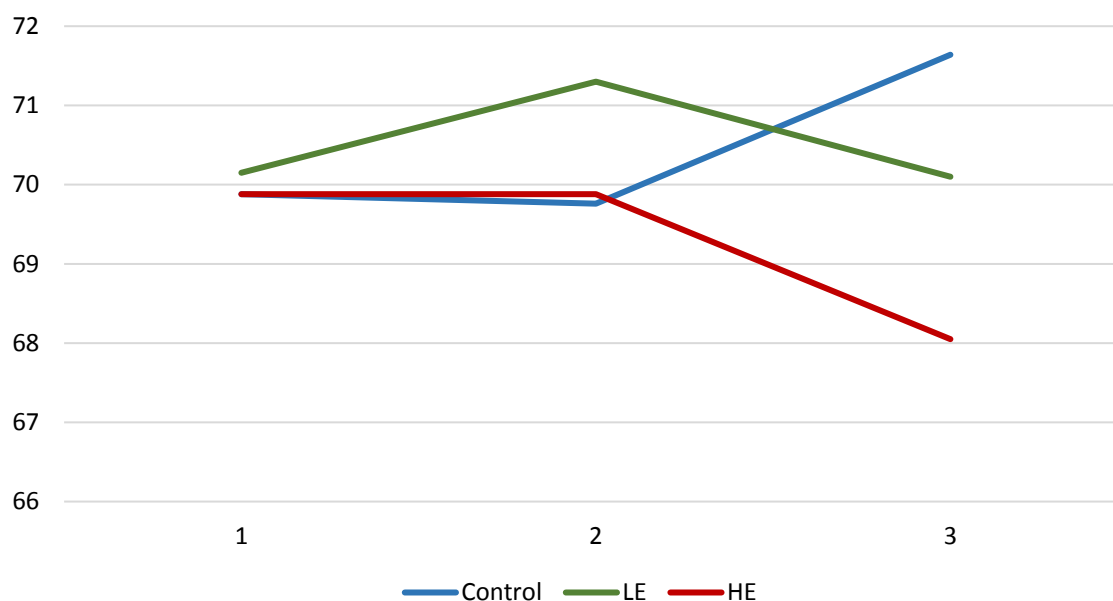
For the purposes of examining the impact of the 1-week follow-up, two-way mixed ANOVAs were used to compare mean differences between groups in general microaggressions detection, category detection and accuracy, and theme detection and accuracy for the pre- and post-time points only. There were no significant interactions or main effects for general microaggression detection, category detection and accuracy, and theme detection and accuracy. Significance ranged from  $p = .111$  to  $p = .992$ .

Table 32

#### *RM-ANOVA for Theme Accuracy Across Time and Condition*

Theme Accuracy	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	$\eta^2_p$
Time	4.876	2	2.438	0.094	.910	.002
Condition	52.486	2	26.243	0.280	.757	.011
Time x Condition	90.013	4	22.503	0.871	.484	.032
Error	2685.429	104	25.821			





*Figure 17.* Theme accuracy across conditions and time. This figure depicts changes in theme accuracy from pre- to post- to follow-up- intervention times by condition. Control = control condition, LE = low-exposure condition, HE = high-exposure condition. 1 = pre-intervention, 2 = post-intervention, 3 = 1-week follow-up. Scores range from 7 – 91 with higher scores indicating higher accuracy rates.

### Research Question 3

Research question 3 was: Does colorblindness moderate the ability of an individual to detect microaggressions? As there were no statistically significant differences between the condition (e.g., control, low-exposure, high-exposure) and time (pre-intervention, post-intervention, follow-up) for any detection or accuracy analysis, no moderating analyses were completed as per the Baron and Kenny (1986) guidelines.

### Post-Hoc Analyses

In the absence of any significant outcomes relating to the role of the colorblindness as a moderating variable, the CoBRAS presented an interesting

opportunity to examine impact on attitudes. A paired-samples *t* test was conducted to evaluate changes from pre-intervention CoBRAS total scores and post-intervention CoBRAS total scores and changes between pre-intervention and post-intervention CoBRAS subscale scores: Unawareness of Racial Privilege, Institutional Discrimination, and Blatant Discrimination. Only pre- and post- intervention scores were used to remain consistent with linearity as not all participants completed a 1-week follow-up CoBRAS measure.

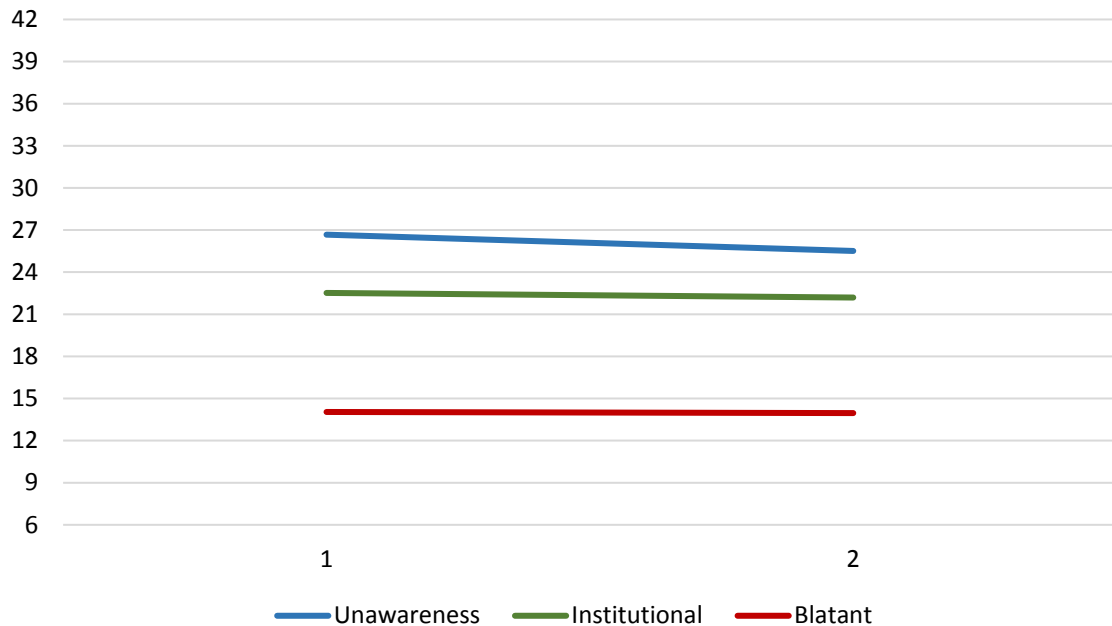
There was a significant decrease in CoBRAS total score from pre-intervention to post-intervention across participants indicating a decrease in overall colorblindness. There was a significant decrease in Unawareness of Racial Privilege scores from pre- to post-intervention across participants indicating an increased awareness of racial privilege. There was no significant difference in Institutional Discrimination scores from pre- to post-intervention across participants or in Blatant Discrimination scores from pre- to post-intervention across participants indicating that there was no change in awareness of Institutional Discrimination or Blatant Discrimination. See Table 33 and Figure 18.

Table 33

*Descriptive Statistics and t-Test Results for CoBRAS*

Outcome	Pretest		Posttest		<i>N</i>	95% CI for mean difference	<i>t</i>	<i>df</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>				
CoBRAS Total	63.23	15.38	61.67	15.65	103	.613, 2.513	3.263*	102
Unawareness of racial privilege	26.67	7.51	25.51	7.87	103	.456, 1.855	3.277*	102
Institutional discrimination	22.52	6.29	22.19	5.84	103	-.143, .803	1.385	102
Blatant racial discrimination	14.04	4.56	13.96	4.71	103	-.458, .614	0.287	102

\**p* < .05 (2-tailed).



*Figure 18.* Pre- and post- intervention CoBRAS subscale scores. This figure depicts changes in CoBRAS subscale scores from pre- to post-intervention. Unawareness = Unawareness of Racial Privilege, scores range from 7-42; Institutional = Institutional Discrimination, scores range from 7-42; Blatant = Blatant Racial Discrimination, scores range from 6-36. Unawareness of Racial Privilege significant at  $p < .05$ .

For further analysis, a two way mixed ANOVA was used to compare mean differences between conditions from pre- to post- intervention for total CoBRAS scores. There was no significant interaction between pre- and post- intervention CoBRAS scores by condition,  $F(2,100) = 1.314, p = .273, \eta^2_p = .026$ . The main effect of time showed a statistically significant difference in CoBRAS total scores from pre- to post- intervention,  $F(1,100) = 10.620, p = .002, \eta^2_p = .096$ . There was no significant main effect for condition,  $F(2,100) = .494, p = .612, \eta^2_p = .010$ .

## CHAPTER V

### DISCUSSION

This study examined three research questions: whether an intervention (high-exposure condition) aimed at White college students was effective in increasing their ability to accurately detect racial and ethnic microaggressions, whether there were differences between the high-exposure, low-exposure, and control conditions, and whether colorblindness moderated students' ability to detect and identify racial and ethnic microaggressions. Overall, the findings were disappointing. In general, participants across conditions had a good ability to detect microaggressions prior to being assigned an experimental condition. Their ability to detect microaggressions did not increase after assignment to any of the treatment conditions. Conversely, the ability to identify the category and theme of microaggressions proved difficult and also unmovable with the brief interventions provided.

General microaggression detection rates were relatively high at the pre-intervention time resulting in little room for improvement across the entire sample. There are numerous and likely interacting variables influencing detection rates. It is possible that the task of determining whether or not a microaggression occurred in the video was too simple. Participants may not have understood what type of microaggression occurred but picked up that *something* occurred in the video. It is equally possible that participants expected that racial and ethnic microaggressions were present in the video clips due to the nature of the study and simply selected *yes* as their answer instead of using discerning detection skills. Since the majority of videos did display a microaggression, participants

answering *yes* were given the edge of being correct. Another possibility is that, as college students are more likely to have experience with anti-bias training or diversity related efforts (McCauley, Wright, & Harris, 2000), these particular participants may have been more knowledgeable about racial and ethnic microaggressions, generally. It may be helpful in future studies to include a measurement for participation in training and/or coursework related to prejudice reduction.

Participants self-selected into this study so there is already a bias of who chose to participate. Self-selection bias of volunteer populations may lead to biased outcomes (Olsen, 2008). The reason participants may have self-selected into the study may be due to unmeasured characteristics (e.g., motivation, interest; Sterba & Foster, 2008) making it difficult to develop conclusions regarding if outcome bias occurred, and if so, the participants' characteristics for the bias. Further, the outcome may be biased by those that chose not to participate in the study, refusal to answer any item within the study, or other varying factors related to participation (e.g., social desirability; Olsen, 2008; Sterba & Foster, 2008). In particular, all recruitment and data collection efforts occurred in the first 100 days of the Trump presidency. The rise of Donald Trump was marked by his unorthodox and outsider perspective (Dodo, 2016) during a contentious 2016 presidential election cycle that was marked by perceptions of class, gender, ability level, education, and of course, race (Jacobson, 2017). Although I cannot certify any claim for certain, race and racism have been embroiled in the political dynamics of the past year likely influencing those who chose to participate in the study, despite their political leanings.

Category and theme detection rates had generally lower scores at the pre-

intervention time; however, there were no significant increases in category and theme detection rates at the post-intervention time indicating that the high-exposure intervention did not complete the goal of increasing detection rates. Category and theme accuracy rates were similarly non-significant from pre- to post- intervention times furthering the indication that the high-exposure intervention condition was not successful in teaching participants how to accurately identify the types of racial and ethnic microaggressions present in the video. As discussed previously, perhaps it was obvious that something occurred in the video; however, participants were unable to pick-up on the exact category and theme of the microaggression. The task of teaching individuals to differentiate between racial and ethnic microaggression types may be too difficult at an introductory level due to the subtlety of microaggressions (D. W. Sue et al., 2007). Another possible reason that participants may have been unable to differentiate between categories and themes of microaggressions is that the current construction and definitions of each category and theme may be faulty (Lilienfeld, 2017). Specifically, the microaggression taxonomy from Sue et al. (2007) was created from observation and consultation data rather than systematic data (Lilienfeld, 2017), suggesting that the taxonomy itself may be problematic and may not provide discrete classifications. While this is a likely influential factor, each video clip had at least an 80% interrater reliability indicating that there is some indication that consensus of microaggression conceptualization can be reached. It is necessary to point out that the high interrater reliability was based on a panel of individuals with extensive training and knowledge related to racial and ethnic microaggressions. Perhaps this level of nuance in understanding racial and ethnic

microaggressions is dependent upon higher levels of training in detecting microaggressions. Specific to category and theme accuracy, I developed an accuracy formula in which incorrect answers were subtracted from correct answers (see Microaggression detection and Microaggression accuracy). The formula may not have been the best approach to determining accuracy; however, based on the response style of questionnaires, this was the most viable option available. For more information regarding response styles, see Limitations and Future Directions.

Further, as the high-exposure intervention video lasted approximately one hour, it is possible that participants did not watch the entire video or engage with the content of the intervention. Although the video was designed to be brief, an hour is still a significantly long time to engage with materials that one is not actively participating in. Attention span for video content decreases as the video gets longer (Geri, Winer, & Zaks, 2017). Although there is no consensus on how to develop online video lectures and materials (Chen & Wu, 2015), creating briefer video lectures may be more impactful. Recently, Focused.Arts.Media.Entertainment (FAME; 2017) created a brief 18-minute video teaching about microaggressions and having people impacted by microaggressions discuss their experiences (<https://youtu.be/ZahtlxW2CIQ>). A brief, high quality video such as this one may be more engaging and, thus, have a detectable impact on detection and accuracy. Additionally, this video addresses not only racial and ethnic microaggressions but also other forms of microaggressions, such as gender-based microaggressions, which may feel more relevant to participants. White participants may feel disconnected from discussions focusing on race and ethnicity but may be more

engaged when other identities are introduced. Although, there are critiques that a movement should not have to benefit the group in power to matter (Pierce, 2016), based on the idea of interest convergence (Delgado & Stefancic, 2001), adding elements that are relevant to the personal lives of those participating in prejudice reduction interventions may yield more fruitful results.

The final research question sought to examine whether colorblindness moderated participants' ability to detect racial and ethnic microaggressions. However, as there were no significant findings, moderator analyses were not conducted. Instead, analyses of colorblindness via the CoBRAS (Neville et al., 2000) were completed to determine if any shifts in attitudes occurred. There was a significant decrease in colorblindness across participants from pre-intervention to post-intervention. Colorblindness has been conceptualized as an obstacle to effective antiracism efforts (Delgado & Stefancic, 2001) and as a racial and ethnic microaggression (D. W. Sue et al., 2007). Although the goal of the study was not to shift colorblindness, the change in colorblindness is an interesting finding. The change in colorblindness may be linked to repeated exposure to racial and ethnic microaggressions via the video clips suggesting that watching repeated videos depicting microaggressions and asking participants to reflect on the content of the video may act as an intervention itself, which is within the frame of consciousness raising (Paluck & Green, 2009). Consciousness raising has historically been rooted in civil rights and feminist movements focusing on increasing awareness of one's place in society at the axis of privilege and oppression (Leonard, 1996). Efforts to purposefully task participants with thinking about prejudice and bias have been effective in reducing said bias and



prejudice (Paluck & Green, 2009) and increasing racial and ethnic awareness and knowledge of racism in college students (Aldana, Rowley, Checkoway, & Richards-Schuster, 2012). The tasks within this study asked participants to attend to prejudice in the form of racial and ethnic microaggressions. I suspect that if a person indicates that a racial or ethnic microaggression occurred, whether they agree with the definition or conceptualization of microaggressions, it becomes harder to evade the role of race in society, thus, increasing consciousness of privilege and oppression. When examining the subscales of the CoBRAS (Neville et al., 2000), there was a significant decrease in Unawareness of Racial Privilege scores across participants. Participation in this study appears to have effectively increased participants' ability to reflect on the privilege Whites hold in society. Also interesting, this was true across conditions indicating that participating in the study at any level influenced participants' ability to reflect on racial privilege. Further, focusing on how microaggressions harmed persons of color may have been a more appropriate approach to engaging White students as there was less confrontation about Whiteness and white privilege (Pierce, 2016) allowing participants to engage with the material without feeling defensive. There were no significant changes in participants' scores on the Institutional Discrimination and Blatant Racial Discrimination subscales. In regards to Institutional Discrimination, there were likely no changes in scores as this study did not attempt to provide education regarding the history of institutional discrimination so the concept may have been too peripheral for participants. Further, due to conative shifts (McConahay & Hough, 1976) in the past 70 years, it is possible that participants' believed that institutional discrimination has been ameliorated.

Blatant Racial Discrimination scores were relatively low at the pre-intervention time so there was likely not a significant shift as participants were generally aware of blatant racial discrimination. For future directions, it is recommended to examine colorblindness by demographic characteristics (e.g., gender, age).

### **Strengths**

This study had numerous strengths. The first was the methodological rigor that framed this study. This study combined the strongest recommendations for prejudice reduction interventions. Specifically, this study was brief (Paluck & Green, 2009; Soble et al., 2011), integrated knowledge, awareness, and skills (Bezrukova et al., 2016; Garriott et al., 2016), used an experimental method (Paluck & Green, 2009), and utilized media (Estrada et al., 2002; Garriott et al., 2016; Soble et al., 2011). It was an experimental design that examined the differences between varying intervention levels (e.g., high-exposure, low-exposure, and control) which has been scarce in the literature (Paluck & Green, 2009) across three different time points. Within the tripartite model of cultural competence (D. W. Sue 2001; S. Sue, 1998), knowledge, awareness, and skills are the core components of cultural competence. This study incorporated elements of all three. Specifically, knowledge was transmitted by providing education on the history of racism, the conceptualization of racial and ethnic microaggressions, and the impact of microaggressions on persons of color. Awareness was assessed by colorblindness with a significant decrease in overall colorblindness. Skills were assessed via the data collection tasks of detection and accuracy of detection of racial and ethnic microaggressions in

video clips. Although the hypotheses were not upheld by the results, this study is the first to attempt to incorporate all three aspects of cultural competence in combination with prejudice reduction intervention techniques focusing on racial and ethnic microaggressions.

The study incorporated genuine media depictions of racial and ethnic microaggressions to engage participants and highlight the manner in which racial and ethnic microaggressions pervade everyday media. Microaggressions were originally conceptualized when examining racism in media (Pierce et al., 1977). This study was not only consistent with the original application of the concept of microaggressions but also expanded the range of media depictions by utilizing various outlets (e.g., television shows, movies, web series).

### **Limitations**

There were numerous limitations within this study. The first is that it is possible that the data collection tasks (e.g., detection and accuracy of microaggressions) were mismatched to the intervention conditions themselves. While the data collection tasks were designed to reflect real-world depictions of racial and ethnic microaggressions, the video clips may have been too complex or convoluted for participants to follow. For instance, this study did not examine how the race and gender of the perpetrator of the microaggression intersected and interacted with the race and gender of the person on the receiving end of the microaggression. The complexities of the interactions in the video clips may have hampered participants' ability to accurately detect the microaggression

categories and themes present. Although the present study collected qualitative data on how participants described what happened in the video clips, it was outside the scope of this dissertation and results were not included so it is not possible to determine if participants' understanding of what happened in the video aligned with the expert panel's ratings and descriptions. For example, in one video, an Asian manager makes a mistake on a nametag for an employee and another employee, a White woman, tells her peer not to complain or the manager "will go in the back and throw himself on a sword." The expert panel categorized this microaggression as a microinsult and the theme as pathologizing cultural values. A participant may have witnessed the same interaction and understood it to be assumption of criminal status due to the indication of violence or perhaps as a non-microaggression because the participant interpreted the woman's action as attempting to be respectful of the manager's effort and heritage. Without qualitative data to understand the context of participants' responses, it becomes impossible to reflect on how to better address these concerns in the future. Finally, it is important to discuss that the results from this study may be an accurate reflection of White college students' ability to detect racial and ethnic microaggressions following an introductory intervention. It is highly possible that increasing knowledge and detection of racial and ethnic microaggressions is a difficult feat that and is reflective of resistance to change (Cárdaba, Briñol, Horcajo, & Petty, 2014). CRT affirms the belief that White individuals are less likely to be aware of racial bias due to the system that has been designed to benefit the group in power (e.g., Whites) and that the group in power wants to remain in power (Delgado & Stefancic, 2001).

Participants completed all materials online making it difficult to evaluate engagement with the condition manipulations, made it impossible to clear any confusion or answer any question that a participant may have had about the materials including the intervention content, and to fully immerse themselves in the experience. There were reading engagement questionnaires in the control and low-exposure conditions assessing participants' reading comprehension and engaged; however, no such measure existed for the high-exposure condition. The high-exposure condition participants completed an Intervention Satisfaction Survey that may reflect on participants' engagement with the intervention material, but there was no way to confirm the level of engagement. For future indications, it is recommended that an engagement measure be used to address this concern.

The response style of this study impacted the researcher's ability to interpret data. Participants were able to select as many options as they desired. The initial reasoning behind this decision was to allow for flexibility in participants' understanding and engagement with the material. However, many participants chose multiple responses. When reviewing the response styles and reviewing the qualitative descriptions given by the participants, many participants appeared to be over-engaged with the material meaning that some participants viewed every option as the correct option. These observations would support the concern about mutable conceptualizations of microaggressions (Lilienfeld, 2017) and participants focusing in on one aspect of the video clip that was different from how the expert panel understood the same video clip. Further, to allay fears of being viewed as racist (D. W. Sue, 2010, 2011), participants

may have overcompensated with their responses as to answer in a socially desirable manner (Sears & Henry, 2003).

This study was conceptualized within a CRT framework (Delgado & Stefancic, 2001). For simplicity, this study focused on racial and ethnic microaggressions neglecting the role of gender, age, perceived sexual orientation, and other dimensions of identity, which is incongruent with the overall framework. As we experience the world in complexity and based on our intersecting identities (Cho et al., 2013; Valdes et al., 2005), a large limitation is the lack of inclusivity of these identities. According to Helms' (1995) White Racial Identity Model, racial identity for White folks is not salient until they have experiences which challenge and confront their worldview that race is unimportant. Although this study may have been that challenge, it is possible that the majority of the participants are in the first stage of their white racial identity where race is not salient to them, and they do not believe race to be important. As race may not be salient for White people, integrating other identities into future research may increase understanding of power and privilege.

Finally, this study relied heavily on technology for its success. All of the materials were distributed online. At times, video clips were unplayable. This was likely due to web browsers being out of date, difficulty with the websites hosting the videos, or technical errors on the website hosting the survey. During data collection, the website hosting the survey underwent updates such that certain web browsers were no longer compatible with the website. Overall, technical difficulties made the experience less engaging and more challenging than desired. For future indications, it is recommended

that researchers provide internet and computer specificities to be able to view the material or utilize an online hosting system that has more availability across systems and web browsers.

### **Future Directions**

One of the exciting pieces of this study is that it is the first of its kind (see Strengths) and provides a starting point to continue future research. Future research should address the limitations within this study. A first step would be to hone in on operational definitions of racial and ethnic microaggressions. It might not be essential for people to be able to differentiate between categories and themes of racial and ethnic microaggressions, especially focusing exclusively on the D. W. Sue et al. (2007) taxonomy as new themes have emerged over the years. I wanted people to be able to differentiate between the categories and themes of microaggressions so that they could be skeptical consumers of media and interactions, understand the roles that different types of microaggressions play in the lives of people of color, and to validate that different people experience different types of microaggressions. Being aware of the categories and themes of microaggressions may have made it less likely that individuals would perpetrate microaggressions if they understood the numerous ways that microaggressions appear. Further, without clearer and distinct conceptualizations of microaggressions (Lilienfeld, 2017; Wong, Derthick, David, Saw, & Okazaki, 2014), this may not be an appropriate task at this time. However, if the task is kept the same, creating a more balanced data collection task of videos with microaggressions compared to videos without

microaggressions to provide more variability and nuance. In this study each video set had one non-microaggression race-based video with six videos depicting microaggressions. A split of equal microaggression and non-microaggression race-based videos would be ideal to address the concern of artificial inflation of saying *yes* to the videos despite the content and interpret participant discernment of the video content.

All materials were completed online. While ideal for quick and expansive dissemination, online participation possibly hampered engagement. Participants were unable to ask questions, engage in back-and-forth dialogue with the intervention leaders and peers, to have immediate responses to concerns. Going forward, it would be ideal to conduct this intervention in-person to determine if results differ compared to online dissemination. However, if online dissemination were to continue, I recommend that researchers utilize a framework to create the video lecture. At this time there are no guidelines for creating video lectures (Chen & Wu, 2015); however, utilizing existing theoretical frameworks would be beneficial to provide an informed and comprehensive video lecture. I was concerned with incorporating the elements recommended for a comprehensive anti-bias intervention without significant thought of how to best incorporate all the elements into a multimedia experience. The cognitive theory of multimedia learning (CTML; Mayer, 2014) provides a theoretical foundation of incorporating narration and graphic images to create new knowledge that is then integrated with previous knowledge to enhance learning. Additionally, video lectures that utilize a capture (i.e., a video of a taped lecture) or picture-in-picture (i.e., overlay of instructor's image on lecture material) approach is correlated to increased engagement



and learning (Chen & Wu, 2015).

This study did not include an engagement check for the high-exposure condition but did include engagement checks for the low-exposure and control conditions. I would recommend that studies using online methods include an engagement check for all conditions, and possibly throughout the online video lecture as interpolated quizzes are more likely to increase task-relevant behaviors (e.g., note taking), increase learning, and decrease mind wandering (Schacter & Szpunar, 2015). Perhaps a more important issue is that the control and low-exposure conditions utilized journal articles which can be dry and tedious. Using other video experiences may be a better comparison to a video intervention. The high-exposure condition may benefit from a briefer video (see Discussion). The low-exposure condition may be a brief video of general cultural competence or race-related content. The control exposure may be a brief video (e.g., a nonrace-related TED talk). As this study attempted to incorporate media, particularly video, utilizing video-based interventions across conditions would be more comparable and probably interesting for participants.

I collected qualitative data that is not present in this dissertation. There were no questions proposed. The qualitative findings were expected to be minimal. It was quite surprising to see the amount of narrative that participants generated, and that it seemed to increase over the course of the study. Qualitative examination of participants' understanding of the video clips is highly recommended for future studies, particularly as qualitative and narrative experiences are consistent with CRT (Delgado & Stefancic, 2001). I did not include the data as it was outside the scope of this paper; however, going

forward, this will be a priority. Other researchers examining participants' ability to engage with racial and ethnic microaggressions would benefit from combining qualitative and quantitative methods. Further, I did not complete any analyses related to differences in specific microaggression categories and themes. For example, were video clips with microinvalidations more confusing to participants? How did participants respond to non-microaggression race-related video clips? These analyses would provide robust information about how participants understood and engaged with the materials. Again, due to the constructs of this paper, those questions were not answered but would provide significant information about the intervention itself and how participants took in the material.

### **Conclusion**

I designed a brief, multimedia, online intervention aimed at increasing detection of racial and ethnic microaggressions in White college students. My intervention did not significantly shift participants' ability to detect microaggressions from pre- to post-intervention and did not significantly differ from the low-exposure (read an article about racial and ethnic microaggressions) or the control condition (read an article about positive psychology). There was a significant decrease in overall colorblindness from pre- to post-intervention across participants. The study had significant strengths including methodological rigor, creativity and originality, and integration of cultural competence concepts. Limitations include possible lack of clearly defined microaggression conceptualization framework, technical difficulties, response style in regards to the

questionnaires, and lack of intersectionality. Future direction recommendations include creating a clearer conceptualization and operationalization of microaggressions, checking engagement for online participants, switching to an in-person format, changing the low-exposure and control condition manipulations, and utilizing qualitative and more robust quantitative data to provide in-depth understanding of participants' experiences.

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## APPENDICES

## Appendix A

### Contact Form

## CONTACT FORM

Thank you for your interest in the Racial and Ethnic Microaggression in Media Study. Please complete the information to continue with participation. You will be sent an email within 24 hours with a link to participate in the study. This step is so that we can assign you to a condition.

Thank you.

**What is today's date?**

This section will ask identifying information such as name and email address. This information will be used to send you study information for participation and will be kept separate from your responses. Within 24 hours of completing this, you will be emailed a link for participation in the study. Once participation is complete, your name and email address will be deleted and removed from all data files.

**Please type your full name.**

**Please provide your SONA ID number if you know it. This will be to ensure that you receive credit for participation.**

**Please provide an email address that you use regularly. This will be the email that information regarding your participation will be sent to so it is important that the email address is typed accurately and is checked regularly.**

To make sure that we link all of your responses to the same person, we are asking you to create a unique identifying pin. This pin will allow us to put all of your responses together. Once your participation is complete, we will remove all identifying information including this unique pin so that your responses cannot be linked.

To create the pin:

Third letter of your first name - Third letter of your last name - Last two digits of your zip code - Birth day (including 0) - Last letter of your first name - Last letter of your last name

For example: Harry Potter - Birthdate 07/30/1980 - Zip Code 12345 (made up as Little Whinging is not real)

PIN: RT4530YR



Appendix B  
Demographics Questionnaire

## Demographics Questionnaire

1. Age:

2. Gender: \_\_\_\_\_ Male \_\_\_\_\_ Female \_\_\_\_\_ Other

3. Race/Ethnicity:

- \_\_\_\_\_ Asian or Asian American
- \_\_\_\_\_ Black or African American
- \_\_\_\_\_ Hispanic or Latino
- \_\_\_\_\_ White, Caucasian, Anglo, European American; not Hispanic
- \_\_\_\_\_ American Indian/Native American
- \_\_\_\_\_ Mixed; Parents are from two different groups
- \_\_\_\_\_ Other (write in): \_\_\_\_\_

4. Religion:

5. Sexual Orientation:

6. Year in college: \_\_\_\_\_ First Year \_\_\_\_\_ Sophomore \_\_\_\_\_ Junior \_\_\_\_\_ Senior

7. Major:

8. Are you a Utah state resident? \_\_\_\_\_ Yes \_\_\_\_\_ No

If not, what state are you a resident in?

9. Disability:

10. Parent education level:

Parent/Caregiver 1 (Please circle one): Mother Father Grandparent Other \_\_\_\_\_

- \_\_\_\_\_ Less than high school
- \_\_\_\_\_ Some high school
- \_\_\_\_\_ High school diploma/GED
- \_\_\_\_\_ Some college
- \_\_\_\_\_ College degree (Associate's, Bachelor's)
- \_\_\_\_\_ Graduate degree (Master's, Doctorate)

Parent/Caregiver 2 (Please circle one): Mother Father Grandparent Other \_\_\_\_\_

- \_\_\_\_\_ Less than high school
- \_\_\_\_\_ Some high school
- \_\_\_\_\_ High school diploma/GED
- \_\_\_\_\_ Some college
- \_\_\_\_\_ College degree (Associate's, Bachelor's)
- \_\_\_\_\_ Graduate degree (Master's, Doctorate)

## Appendix C

### Microaggression Detection Questionnaire

### Microaggression Detection Questionnaire

You will now watch a series of video clips and be asked to answer questions about the video clips. The video clips may or may not depict a racial/ethnic microaggression. You may not fully understand what you are being asked, and that is okay. Please do **NOT** use the internet to help you understand what is being asked. Just answer the questions to the best of your abilities.

Did you see a racial microaggression?

Yes                      No

If yes, please describe what happened.

What category was the racial/ethnic microaggression? Please select all that apply

- a.**Microinsult:** behavioral/verbal remarks or comments that convey rudeness, insensitivity and demean a person's racial heritage or identity.
- b.**Microassault:** explicit racial derogations characterized primarily by a violent verbal or nonverbal attack meant to hurt the intended victim through name-calling, avoidant behavior or purposeful discriminatory actions.
- c.**Microinvalidation:** Verbal comments or behaviors that exclude, negate, or nullify the psychological thoughts, feelings, or experiential reality of a person of color.
- d.**Not Sure**

What type/theme of racial/ethnic microaggression did you see?

- a.**Ascription of Intelligence:** Assigning a degree of intelligence to a person of color based on their race
- b.**Second Class Citizen:** Treated as a lesser person or group
- c.**Pathologizing Cultural/Communication styles values:** notion that the values and communication styles of people of color are abnormal
- d.**Assumption of Criminal Status:** presumed to be a criminal, dangerous, or deviant based on race
- e.**Environmental:** racial assaults, insults and invalidations which are manifested on systemic and environmental levels
- f.**Alien in Own Land:** belief that visible racial/ethnic minority citizens are foreigners
- g.**Colorblindness:** denial or pretense that a White person does not see color or race

h.**Myth of Meritocracy:** statements which assert that race plays a minor role in life success

i.**Denial of Individual Racism:** denial of personal racism or one's role in its perpetuation

j.**Not Sure**

## Appendix D

### The Color-Blind Racial Attitudes Scale

## CoBRAS

**Please respond to the following questions by indicating next to each item, to what extent you agree with each statement.**

Strongly Disagree	Disagree	Somewhat Disagree	Somewhat agree	Agree	Strongly Agree
1	2	3	4	5	6

- \_\_\_ 1. White people in the U.S. have certain advantages because of the color of their skin.
- \_\_\_ 2. Race is very important in determining who is successful and who is not.
- \_\_\_ 3. Race plays an important role in who gets sent to prison.
- \_\_\_ 4. Race plays a major role in the type of social services (such as type of health care or day care) that people receive in the U.S.
- \_\_\_ 5. Racial and ethnic minorities do not have the same opportunities as white people in the U.S.
- \_\_\_ 6. Everyone who works hard, no matter what race they are, has an equal chance to become rich.
- \_\_\_ 7. White people are more to blame for racial discrimination than racial and ethnic minorities.
- \_\_\_ 8. Social policies, such as affirmative action, discriminate unfairly against white people.
- \_\_\_ 9. White people in the U.S. are discriminated against because of the color of their skin.
- \_\_\_ 10. English should be the only official language in the U.S.
- \_\_\_ 11. Due to racial discrimination, programs such as affirmative action are necessary to help create equality.
- \_\_\_ 12. Racial and ethnic minorities in the U.S. have certain advantages because of the color of their skin.
- \_\_\_ 13. It is important that people begin to think of themselves as American and not African American, Mexican American or Italian American.
- \_\_\_ 14. Immigrants should try to fit into the culture and values of the U.S.
- \_\_\_ 15. Racial problems in the U.S. are rare, isolated situations.
- \_\_\_ 16. Talking about racial issues causes unnecessary tension.
- \_\_\_ 17. Racism is a major problem in the U.S.
- \_\_\_ 18. It is important for public schools to teach about the history and contributions of racial and ethnic minorities.
- \_\_\_ 19. It is important for political leaders to talk about racism to help work through or solve society's problems.
- \_\_\_ 20. Racism may have been a problem in the past, it is not an important problem today

## Appendix E

### Control Condition Article Questionnaire



## Control Condition Article Questionnaire

Thank you for reading the article. Please complete the following questions.

1. Who was the father of positive psychology?
  - a. **Seligman**
  - b. Freud
  - c. Bandura
2. There is no set definition as to what positive psychology is.
  - a. **True**
  - b. False
3. The metaphysical view of positive psychology is to essentially change the psychology's predominant focus on solely repairing negative events to also include building on positive events.
  - a. **True**
  - b. False
4. In the author's view, what represents the greatest achievement in positive psychology?
  - a. **Taxonomic influence**
  - b. Self-actualizations
  - c. Theory of mind
5. It is hoped by the authors of the article that positive psychology will soon disappear.
  - a. **True**
  - b. False
6. Positive psychology is presently at a crossroads of three possible routes.
  - a. **True**
  - b. False

## Appendix F

### Low-Exposure Condition Article Questionnaire

## Low-Exposure Condition Article Questionnaire

Thank you for reading the article. Please complete the following questions.

1. Perpetrators of microaggressions are usually aware that they are engaging in such.
  - a. True
  - b. False
2. Which of the following is not a type of microaggressions?
  - a. microassault
  - b. microallegation
  - c. microinsult
  - d. microinvalidation
3. The authors of the article would agree that microaggressions do not hinder opportunities for success because anyone can succeed if they try hard enough.
  - a. True
  - b. False
4. What type of vehicle were the people in the article in when they were told to go sit in the back?
  - a. Bus
  - b. Airplane
  - c. Train
5. Stating that “I do not see color” is an example of which them of microaggressions?
  - a. Color-blindness
  - b. Color-ignorance
  - c. Color-sensitivity
  - d. Color-justification
6. In most cases, when individuals are confronted with their microaggressive acts, the perpetrator usually believes that the victim has overreacted and is being overly sensitive and/or petty.
  - a. True
  - b. False

## Appendix G

### High-Exposure Intervention PowerPoint Slides

## Slide 1

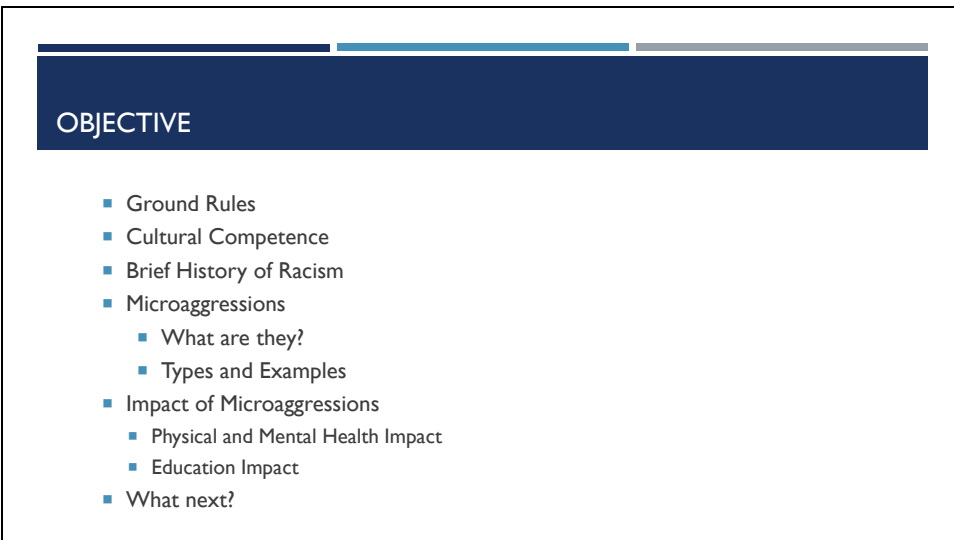


Slide 1 features a title slide with a dark blue header bar at the top. Below the header, the title "MICROAGGRESSIONS" is displayed in a large, bold, dark blue font. Underneath the title, the author's name "BY: CHRISTINA PATTERSON, M.S." is written in a smaller, dark blue font. A large, solid dark blue rectangular box occupies the lower half of the slide.

# MICROAGGRESSIONS

BY: CHRISTINA PATTERSON, M.S.

## Slide 2

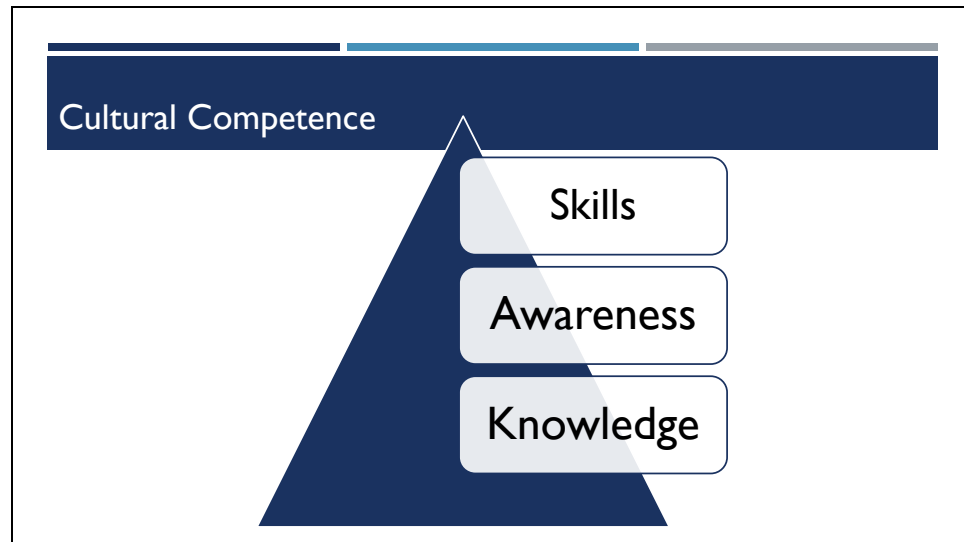


Slide 2 features a dark blue header bar at the top with the word "OBJECTIVE" in white, bold, uppercase letters. Below the header, a bulleted list of objectives is presented in a dark blue font. The list includes: Ground Rules, Cultural Competence, Brief History of Racism, Microaggressions (with sub-points: What are they? and Types and Examples), Impact of Microaggressions (with sub-points: Physical and Mental Health Impact and Education Impact), and What next?

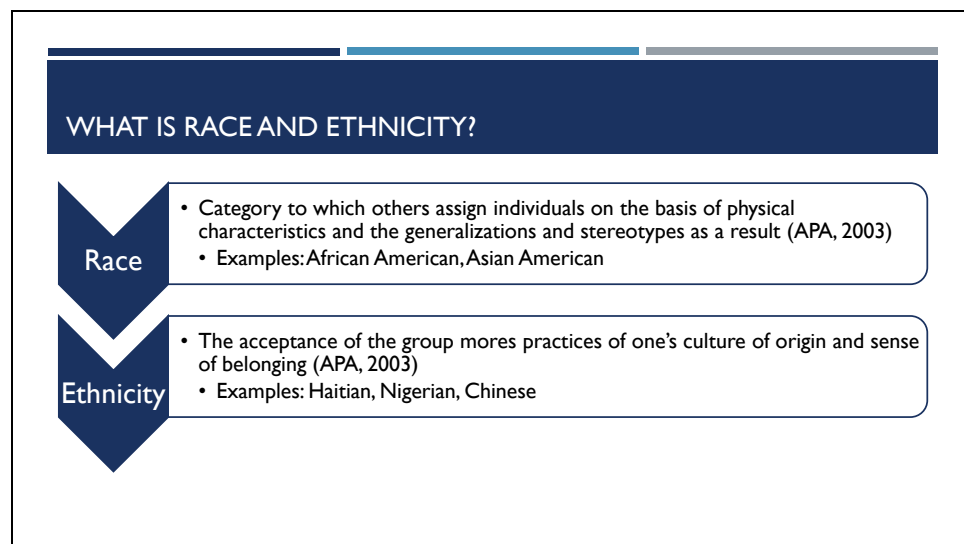
## OBJECTIVE

- Ground Rules
- Cultural Competence
- Brief History of Racism
- Microaggressions
  - What are they?
  - Types and Examples
- Impact of Microaggressions
  - Physical and Mental Health Impact
  - Education Impact
- What next?

Slide 3



Slide 4

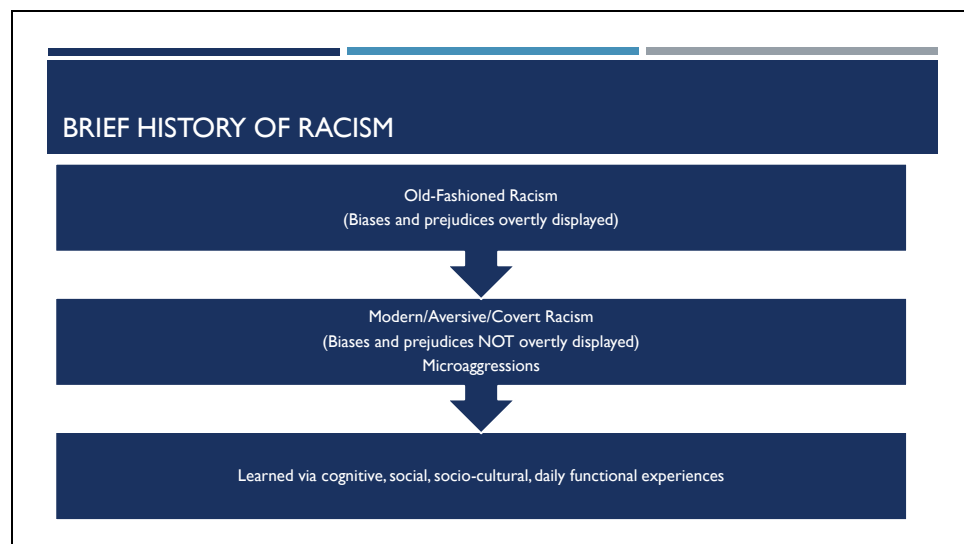


## Slide 5

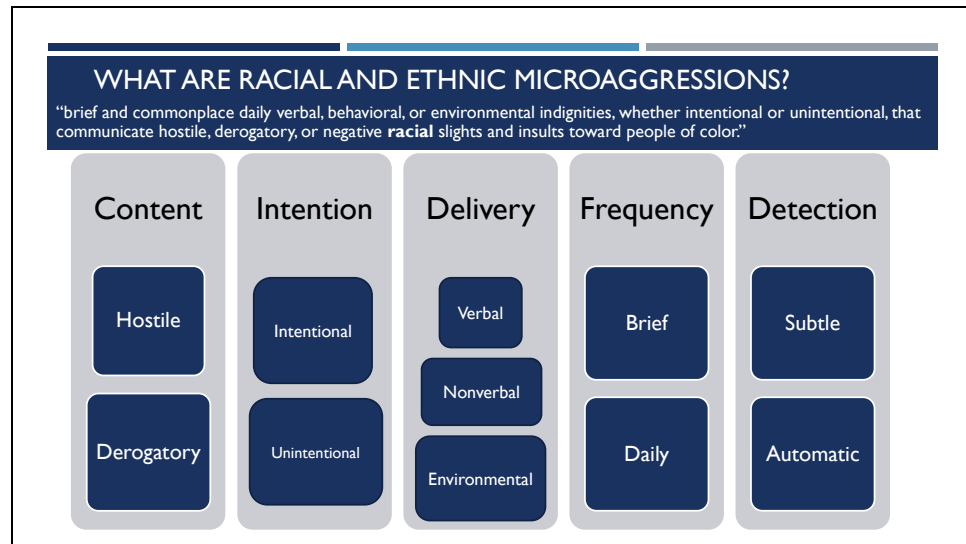
## WHAT IS RACISM?

- Racism
  - individual attitudes, beliefs, and acts towards minorities that are negative
  - system of social power that is not equal for all groups that disadvantages minorities
- Three things inherent:
  - 1) One group believes itself to be superior
  - 2) "Superior" group has power to carry out racist behavior
  - 3) Affects multiple racial/ethnic groups

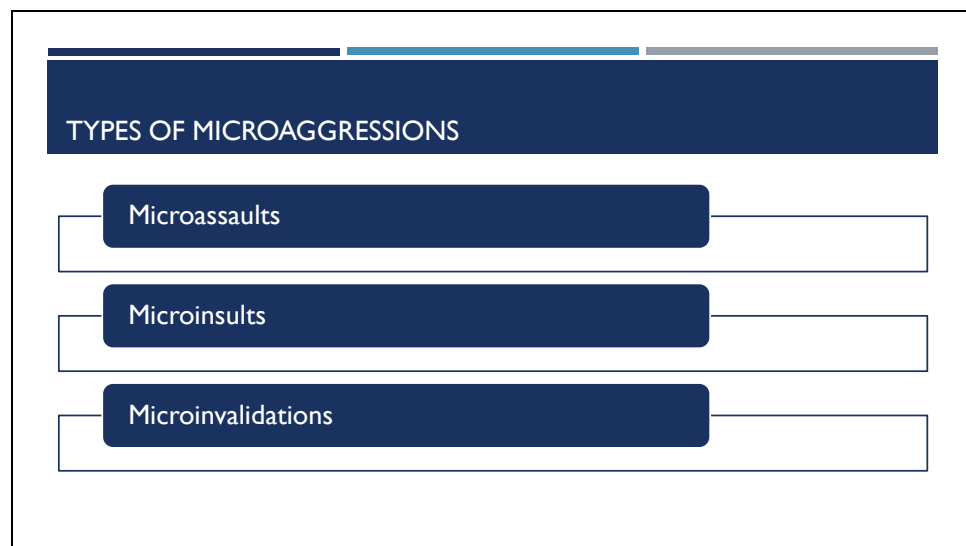
## Slide 6



Slide 7



Slide 8





## Slide 9

**MICROASSAULTS**

"An explicit racial derogation characterized primarily by a verbal or non-verbal attack meant to hurt the intended victim through name-calling, avoidant behavior, or purposeful discriminatory actions"

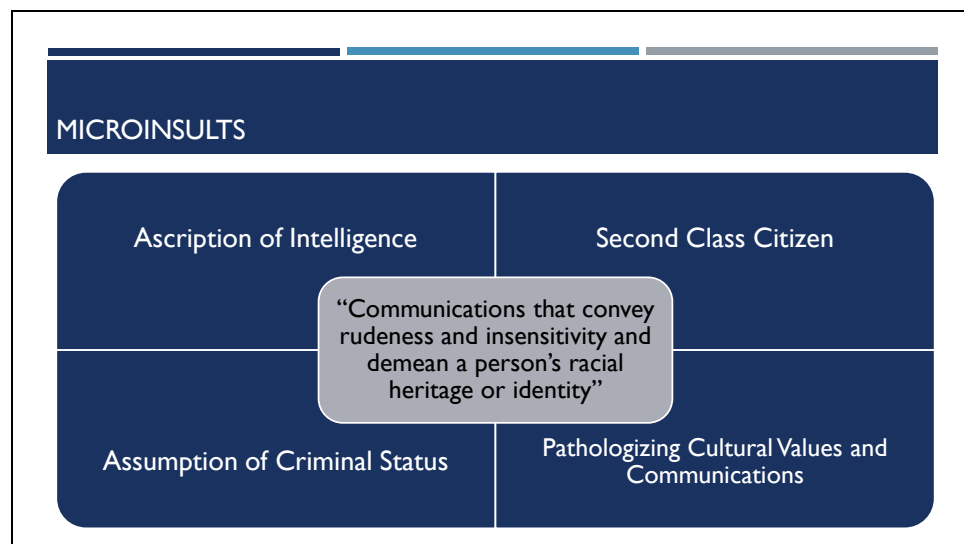
**Shelly**  
@Shelly\_Smyth

I hope nigger Obama loses the election and Romney puts all the black people in concentration camps :).

3 RETWEETS

5:40 PM - 22 Oct 12 - Embed this Tweet

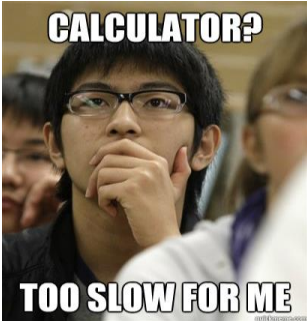
## Slide 10



## Slide 11

**ASCRPTION OF INTELLIGENCE**

Assigning a degree of intelligence to a person of color based on their race.



A meme featuring a man with glasses and a thoughtful expression, with the text "CALCULATOR?" at the top and "TOO SLOW FOR ME" at the bottom.

## Slide 12

**ASSUMPTION OF CRIMINAL STATUS**

Presumed to be a criminal, dangerous, or deviant based on race



A cartoon illustration of a man with a red cap and a surprised expression, looking at a sign that reads "OKAY" and "NOT OKAY".

## Slide 13

## SECOND CLASS CITIZEN

Treated as a lesser person or group



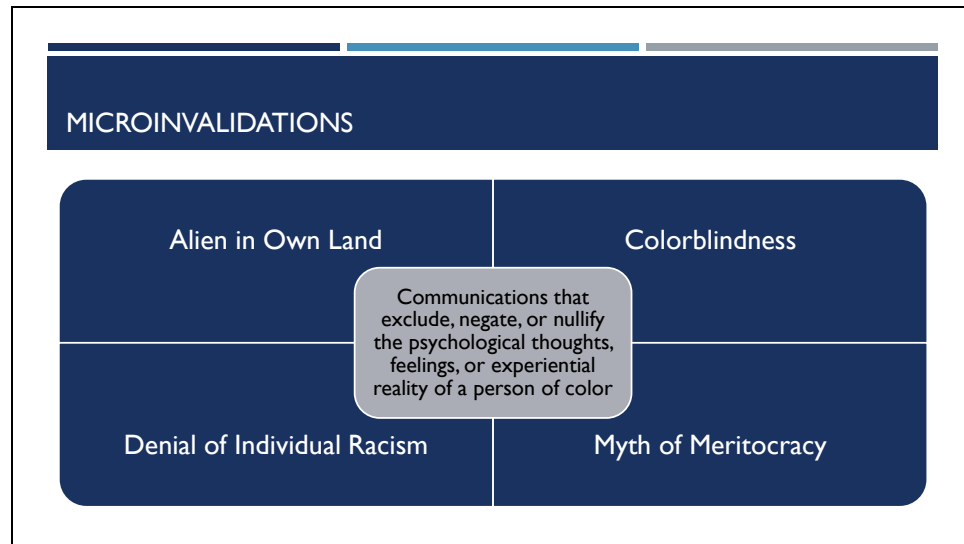
## Slide 14

## PATHOLOGIZING CULTURAL VALUES AND COMMUNICATIONS

Notion that the values and communication styles of people of color are abnormal.




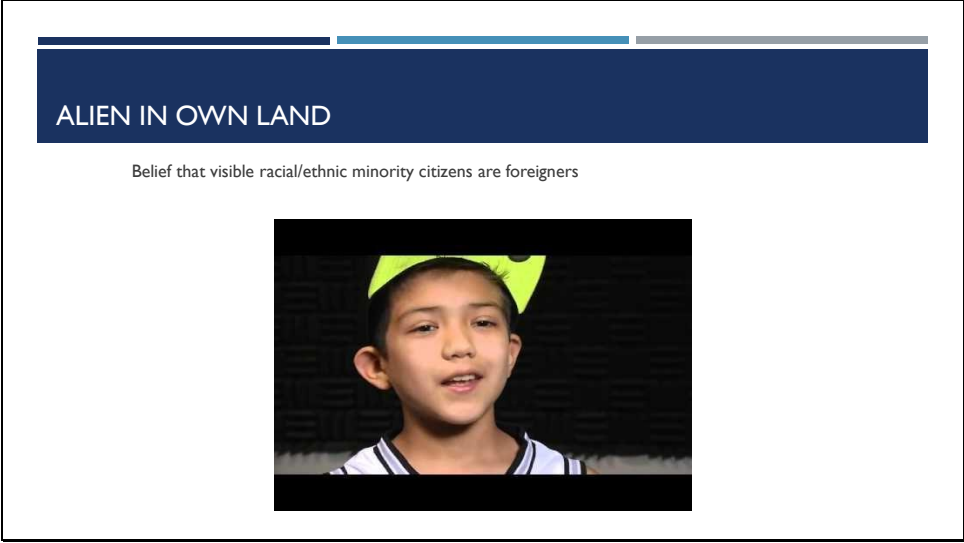
## Slide 15



## Slide 16

**ALIEN IN OWN LAND**

Belief that visible racial/ethnic minority citizens are foreigners

A video frame showing a young boy with dark hair wearing a yellow headband and a white shirt with a dark collar. He is looking slightly to the right with a neutral expression.Slide 16 content including the title "ALIEN IN OWN LAND", the definition "Belief that visible racial/ethnic minority citizens are foreigners", and a video frame of a young boy.

## Slide 17

## DENIAL OF INDIVIDUAL RACISM

Denial of personal racism or one's role in its perpetuation.



## Slide 18

## COLORBLINDNESS

Denial or pretense that a White person does not see color or race.



## Slide 19

## MYTH OF MERITOCRACY

Statements which assert that race plays a minor role in life success.

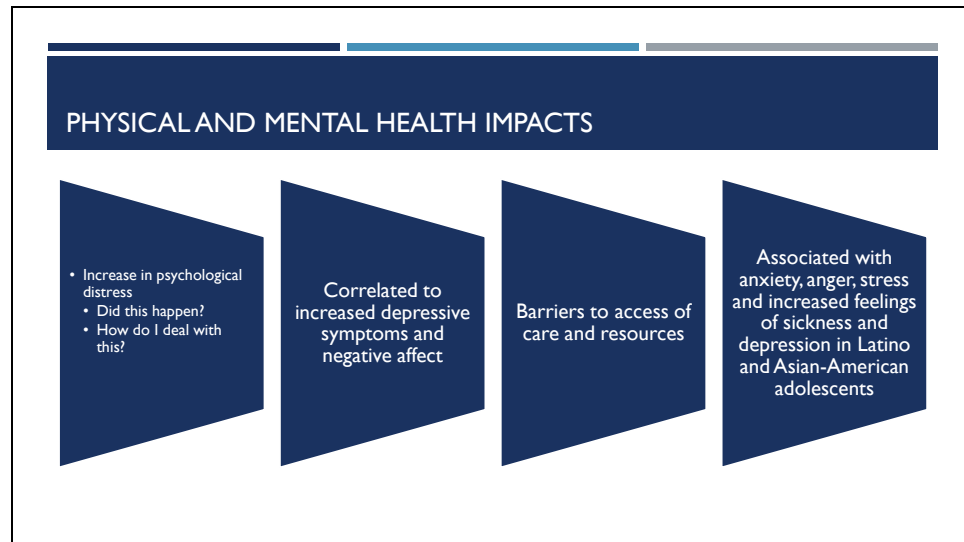
A cartoon illustration of a woman with blonde hair, wearing a black top with a white 'M' on it. She has a speech bubble that says "RACE SHOULD NEVER BE USED AS AN EXCUSE FOR ONE'S SHORTCOMINGS." and another speech bubble that says "ESPECIALLY BY ALL YOU BLACKS AND LATINOS WHO ARE KEEPING ME DOWN!".

**IALS**  
ALCANTARA  
©2005  
DIVERSITY  
EFFECTIVENESS

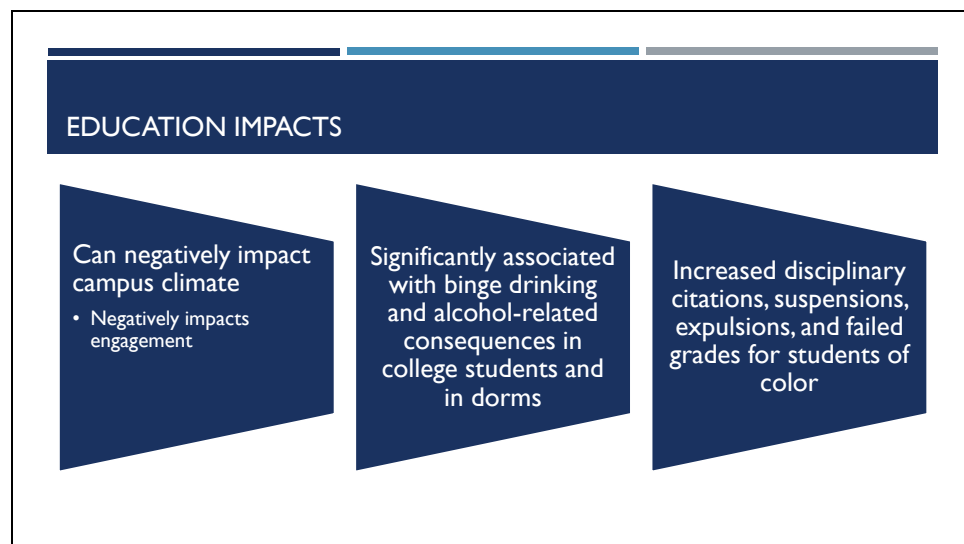
## Slide 20

## Why does this matter?

## Slide 21



## Slide 22



## Slide 23



# Thank you!

## Slide 24



## NOW WHAT HAPPENS?

- If you have any additional questions about the study or about the presentation, please contact Christina Patterson, M.S. at [cpatterson@aggiemail.usu.edu](mailto:cpatterson@aggiemail.usu.edu)
- Next steps:
  - Complete the post survey that includes a set of videos, CoBRAS, MEQ, and Intervention Satisfaction Questionnaire
  - In one week, you will receive a follow-up email to complete a third survey. If you complete the third survey, you will receive \$10 for participation



## Appendix H

### Intervention Satisfaction Survey

## Intervention Satisfaction Survey

Please read each item and circle the number that best reflects your thoughts about the presentation.

**1 = Not at all True/Strongly Disagree**

**7 = Very True/Strongly Agree**

1. I learned something new during the presentation on racial microaggressions.

1      2      3      4      5      6      7

2. The presentation is relevant to my personal life.

1      2      3      4      5      6      7

3. The presentation is relevant to my professional/academic life.

1      2      3      4      5      6      7

4. The presentation was useful.

1      2      3      4      5      6      7

5. The activity/activities enhanced my understanding of the material.

1      2      3      4      5      6      7

6. Overall, I am satisfied with the presentation.

1      2      3      4      5      6      7

7. The presentation leader was knowledgeable about the material.

1      2      3      4      5      6      7

8. The presentation leader responded to group concerns with immediacy.

1      2      3      4      5      6      7

9. The presentation leader responded to group concerns with responsiveness.

1      2      3      4      5      6      7

10. The presentation leader was biased about the presented material.

1      2      3      4      5      6      7

11. The presentation leader was generally competent.

1      2      3      4      5      6      7

12. I gained new information about the definition of racial microaggressions.

1      2      3      4      5      6      7

13. The presentation leader was culturally competent.

1      2      3      4      5      6      7

14. I gained new information about the types of racial microaggressions.

1      2      3      4      5      6      7

## CURRICULUM VITAE

CHRISTINA PATTERSON  
 (702) 767-2730  
[cpatterson@aggiemail.usu.edu](mailto:cpatterson@aggiemail.usu.edu)

**Education:**

<b>Ph.D.</b>	<b>Combined Clinical/Counseling/School Psychology</b> Utah State University, Logan, UT ( <i>APA Accredited</i> ) <u>Dissertation:</u> <i>Increasing knowledge and detection of racial and ethnic microaggressions in White college students.</i> <u>Advisor:</u> Melanie M. Domenech Rodríguez, Ph.D.	Expected 2017
<b>M.S.</b>	<b>Psychology - Clinical Emphasis</b> Eastern Washington University, Cheney, WA <u>Thesis:</u> <i>Examining the Relationships Between Childhood Sexual Abuse, Sexual Identity Development, and Sexual Satisfaction.</i> <u>Advisor:</u> Theresa Martin, Ph.D.	2012
<b>B.A.</b>	<b>Psychology</b> University of Nevada, Las Vegas, Las Vegas, Nevada	2009

**Clinical Experience:**

<b>Psychology Intern - Integrated Care Track</b> University of New Mexico - Health Science Center Internship Albuquerque, NM	07/2016 – Pres.
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**Major Rotations:**

*Programs for Children and Adolescents:* Services provided to youth between the ages of 2 – 18 years and families to address major mental illness, trauma, disruptive behavior disorders, etc.

Responsibilities: Psychological testing, individual and family therapy, peer-supervision as a function of group supervision  
Supervisors: Jerald Belitz, Ph.D. & Rachel Miller, Psy.D.

*FOCUS Clinic:* Interdisciplinary team providing services for children 0- 3 years who are at risk for developmental delay due to: 1) pre-natal exposure to drugs and alcohol, and/or 2) environmental challenges such as family substance abuse.

Responsibilities: Interdisciplinary team meetings, individual, family, and infant mental health therapy at the clinic or in-home, consultation with medical team and other providers, participation and coordination of in- house trainings

*Supervisors:* Marcia Moriarta, Psy.D. & Peggy MacLean, Ph.D.

### **Minor Rotation:**

*Truman Health Services:* Level 3 NCQA Patient Centered Medical Home offering highest level of care and treatment options for HIV and gender services

Responsibilities: Conduct intakes for the Encino Gender Wellness Clinic for trans\* patients, individual therapy, walk-in and crisis intakes at the Transgender Resource Center, neuropsychological assessment for HAND

*Supervisor:* Kathryn Lenberg, Ph.D.

---

05/2015-06/2016

### **Practicum Student Therapist**

*Brigham City Hospital - Cardiac Rehabilitation Center  
Brigham City, UT*

Responsibilities- individual and group therapy, brief intervention, health related consultations for adults recovering from heart procedures and surgeries. Instructed monthly stress management classes. Participated and co-planned monthly Mended Hearts support group.

*Supervisor:* M. Scott DeBerard, Ph.D.

---

### **Graduate Student Assistant Therapist**

08/2013 – 6/2016

*Neuropsychological Center of Utah  
Clinton, UT*

Responsibilities- individual, family, and group therapy for children, adolescents, and adults. Psychodiagnostic and neuropsychological assessments

*Supervisor:* Adam Schwebach Ph.D.

---

**Practicum Student Therapist**

08/2014 –05/2015

*USU Student Health and Wellness Center, Logan, UT*

Responsibilities: individual therapy for adults, patient consultation for service need and evaluation, staff consultation, attend staff meetings, weekly individual and group supervision.

*Supervisor:* M. Scott DeBerard, Ph.D.

---

**Practicum Student Therapist**

08/2013–05/2014

*Bear River Charter School, Logan, UT*

Responsibilities- individual and group therapy for children in grades K-8, classwide interventions, teacher/faculty consultation, participated in school based meetings.

*Supervisors:* Gretchen Gimpel-Peacock Ph.D. & Donna Gilbertson Ph.D.

---

**Practicum Student Therapist**

08/2012 -06/2014

*Psychology Community Clinic, Logan, UT*

Responsibilities- assessment intakes, psychological assessments, and individual and family therapy with children, adolescents, and adults

*Supervisors:* Gretchen Gimpel-Peacock Ph.D. & Sue Crowley Ph.D.

---

**Master Level Intern**

04/2011 -06/2012

*Children's Home Society of Washington, Spokane, WA*

Responsibilities- Provided child, adult, and family therapy Co-facilitated support and psychoeducational groups. Participated in child-focused treatment trainings.

*Primary supervisor:* Suzanne Apelskog, M.S.

**Research Experience:**

---

**Graduate Student Researcher**

09/2012 - Present

*Culture and Mental Health Lab*

Supervisor: Melanie Domenech-Rodriguez, Ph.D.

Utah State University, Logan, UT

Dissertation: *Increasing knowledge and detection of racial and ethnic microaggressions in White college students*

---

---

**Graduate Student Research Assistant**

08/2012 – 07/2013

*Kellogg Research Grant*Supervisor: Mark Innocenti, Ph.D.

Utah State University, Logan, UT

Examined differences in classroom management styles and vocabulary development in preschool classes in public, daycare, and control samples.

Responsibilities: Coordinate assessors schedules, locations, payroll, conduct meetings and trainings, CLASS observations, score and check PPVT and PALS protocols.

---

**Principal Investigator**

10/2011 – 06/2012

Human Sexuality Lab

Supervisor: Theresa Martin, Ph.D.

Eastern Washington University, Cheney, WA

*Thesis: Examining the relationships between childhood sexual abuse, sexual identity development, and sexual satisfaction*

---

**Graduate Research Assistant**

09/2011 – 06/2012

Compassion Lab

Supervisor: Russell Kolts, Ph.D.

Eastern Washington University, Cheney, WA

Examined the applications of Compassion Focused Therapy (CFT).

Responsibilities: Conducted blind pre-assessments for CFT Anger Group at Airway Heights Correctional Facility.

---

**Graduate Research Assistant**

09/2010 – 06/2012

ADVANCE – Institutional Transformation Catalyst

Supervisor: Kayleen Islam-Zwart, Ph.D.

Eastern Washington University, Cheney, WA

NSF- funded grant examining recruiting, promoting, and retaining female faculty members in the Science, Math, Technology, and Engineering fields.

Responsibilities: Reviewed and modified surveys and measures. Constructed online survey application, SPSS databases and entered data. Wrote and constructed intra-university white papers and memorandums.

---

**Research Assistant**

04/2009 – 05/2010

Equal Access to Secondary Education

Supervisor: Jennifer Rennels, Ph.D.

University of Nevada, Las Vegas, Las Vegas, NV

Focus on increasing access to higher education in at-risk high school students

Responsibilities: Assisted in completion of project's IRB materials. Co-founded and developed application, orientation, and recruitment materials for Campus Connections Program. Coordinated peer meetings. Coordinated collaborative efforts with Gear Up. Organized recruitment efforts on campus and in community. Organized correspondence with interested participants.

**Publications:**

**Patterson, C., & DeBerard M. S.** (in preparation). *Brief transdiagnostic cognitive therapy for anxiety and depression in a primary care setting.*

**Patterson, C., Papa, L. Reveles, A., & Domenech Rodríguez, M.** (in revision). *Undergraduate student change in colorblind racial attitudes: Impact of a multicultural psychology course.* Submitted to Scholarship of Teaching and Learning in Psychology.

**Professional Conference Poster Presentations**

Reveles, A., Papa, L., **Patterson, C.**, Domenech Rodríguez, M. (2016). Shifts in undergraduate multicultural competence: Impact of a multicultural psychology course. Poster presented at the 2016 National Latino Psychology Association Bi-Annual Conference in Orlando, Florida.

**Patterson, C.** & Domenech Rodríguez, M. (2015). *Undergraduate student change in colorblind racial attitudes: Impact of a multicultural psychology course.* Poster presented at the 2015 Rocky Mountain Psychological Association Annual Conference, Boise, Idaho.

Potts, S., Dance, C., **Patterson, C.**, & DeBerard, M. S. (2015). *Exploring the relationship between mindfulness and religiosity in a college student sample.* Poster presented at the Society of Behavioral Medicine Annual Conference, San Antonio, TX.

Myers, T. D., Bennett, C., **Patterson, C.**, Yotz, J., & Kolts, R. L. (2012, April). *Mindfulness, impulsivity, empathy, and sexual aggression in University students.* Poster presented at the 2012 Convention of the Western Psychological Association, San Francisco, CA.

**Patterson, C.** (2011). *The impact of childhood sexual abuse on the sexual whole*. Poster presented at the 2011 Washington Counseling Association Annual Conference, Spokane, Washington.

Islam-Zwart, K., Castillo, A., & **Patterson, C.** (2011). *The First Step: Faculty work-life survey*. Poster presented at the 2011 ADVANCE Program Meeting, Washington D.C.

Haderlie, M., Herdzik, K., LaPota, H., DiSano, P., **Patterson, C.**, Just, R., Donohue, B., & Allen, D. (2009). *Psychometric evaluation of the Life Satisfaction Scale-Revised for Child Welfare*. Poster presented at the Thirty-fifth Annual Association for Behavioral Analysis International, Phoenix, Arizona.

Wechsler, A., Kaur, H., **Patterson, C.**, & Kearney, C. (2009, November). *The additive traumatic effects of neglect on maltreated adolescents*. Poster presented at the 2009 U.S. Psychiatric and Mental Health Congress, Las Vegas, Nevada.

#### **Professional Interactive Presentations:**

Bachofer, S., & **Patterson, C.** (2017). Medication Assisted Treatment and behavioral treatment of Substance Use Disorders: More than the sum of the parts. Interactive discussion presented at the 2017 New Mexico Judicial Conclave, Albuquerque, NM.

**Patterson, C.**, & Papa, L., (2015, April). Increasing knowledge and detection of racial and ethnic microaggressions. Workshop presented at the annual conference of the Rocky Mountain Psychological Association, Boise, ID.

**Patterson, C.**, & Papa, L. (2014). *Graduate students of color: Intersectionality of race, ethnicity, and gender*. Interactive discussion presented at annual meeting of Society for the Psychological Study of Culture, Ethnicity, and Race Conference, Eugene, Oregon.

Gilbertson, D., Barret, C., Papa, L., Adams, L., & **Patterson, C.** (2013). *School-wide cultural competence: Programs targeting chronic stressors. Microaggressions within a multi-tier framework*. Workshop presented at the Utah Multi-tiered Systems of Supports & Effective Practices Conference, Layton, Utah.

#### **Teaching/Lecture Experience:**

##### **Guest Lecturer**

October 2014

Microaggressions

Psychology 5000: Race, Culture, Class, and Gender Issues in Health

Utah State University, Logan, UT



**Guest Lecturer**

January 2014

Microaggressions

Psychology 7360: Clinical Child/School Counseling Practicum

Utah State University, Logan, UT

**Guest Lecturer**

October 2013

Microaggressions

Psychology 4240: Multicultural Psychology

Utah State University, Logan, UT

**Guest Lecturer**

Microaggressions

Psychology 2010: Orientation to Psychology as a Career and Profession

Utah State University, Logan, UT

**Guest Lecturer**

November 2013

Microaggressions

Psychology 6850: Introduction to the Combined Doctoral Program

Utah State University, Logan, UT

**Instructor**

Jan. 2013 - June 2013

Interpersonal Relationships

Abnormal Psychology

Broadview University, Layton, UT

**Professional Service:****Committee Member**

11/2014 -06/2016

*Utah Psychological Association Diversity Committee***Recruiter**

11/2014

*The California Forum for Diversity in Graduate Education**Recruitment Fair*Recruitment for Emma Eccles Jones College of Education and  
Human Services, University of California, San Diego

**Committee Member**

11/2014 -06/2016

*Utah Psychological Association Diversity Committee***Co-Creator and President**

11/2009 -07/2010

*Campus Connections Program*

The Campus Connections Program was developed to pair at-risk high school students with college mentors to increase enrollment and access to higher education.

**Professional Online Training Presentations:**

Hendrickson, M., & **Patterson, C.** (2017). Responding to diversity in child and adolescent health care settings. Indian Health Services.

**Patterson, C.**, Papa, L., & Reveles, A. (2015, August 22). *Culturally competent supervision*. Utah Psychological Association.

**Patterson, C.** & Papa, L. (2015, June 13). *Understanding the impact of microaggressions in different psychological settings*. Utah Psychological Association.

**Community Outreach Presentations:**

Adams, L., Campbell, J., Kemple-Reeves, A., Leatham, McPherson, K., L., Miner, M., Papa, L., & **Patterson, C.** (2014, May). Diversity in leadership. Presentation for the Hugh O'Brian Youth Leadership Seminar, Aspen Grove, UT.

Kemple-Reeves, A., **Patterson, C.**, & Zimmerman, R. (2014, July). Stress management training. Presentation for the Community Development Institute - Head Start, Salt Lake City, UT.

**Awards:****Poster Award**

2015

Society of Teaching of Psychology  
Rocky Mountain Psychology Association

**Graduate Student Travel Scholarship (\$500)**

2014

Division 45 Research Conference  
University of Oregon, Eugene, OR

**Poster Award**

2015

Society of Teaching of Psychology  
Rocky Mountain Psychology Association

**Outstanding Undergraduate Research Award**

2009

Achievement Center  
University of Nevada, Las Vegas, Las Vegas, NV

**Dean's Honor List**

Fall 2005,  
2007 - 2009

University of Nevada, Las Vegas

**Millennium Scholarship Recipient (\$10,000)**

2004 - 2009

University of Nevada, Las Vegas, Las Vegas, NV

**Writers-in-the-Schools Scholarship Recipient (\$1,000)**

2004

Las Vegas, NV